MARCH 1981 NUMBER 439 -- Part II

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Solar - Geophysical Data

Part II (Comprehensive Reports)

NO. 439 MARCH 1981

DATA FOR
SEPTEMBER 1980
OCTOBER 1979
SEPTEMBER 1979

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SOLAR-GEOPHYSICAL DATA

No. 439

Issued in two parts

Helen E. Coffey, Editor

J. Virginia Lincoln, Chief
Solar-Terrestrial Physics Division

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Notes:

"427A 50" listed under 1980 Jan means that the sunspot drawings for Jan 1980 were contained in *Solar-Geophysical Data* Number 427 - Part I, beginning on page 50.

A = Part I, B = Part II.

----- = no data available.
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SGD 439 Part II (Comprehensive)

SEPTEMBER 1980 DATA

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NOTE ON DELAY OF GROUPED SOLAR FLARE DATA:

Beginning with the July 1980 issue of *Solar-Geophysical Data*, we planned to publish the final listing of solar flares 13 months, rather than 6 months, from the date of observation. Although this schedule has not been met since the July 1980 issue was published, we and our colleagues at the Meudon Observatory plan to return to the 13-month delay as soon as possible. This new schedule will cause the Daily Flare Index and the Regional Flare Index to appear 13 and 14 months from the date of observation. At the same time we are suspending indefinitely publication of the Abbreviated Calendar Record. We deeply regret this situation, but the volume of data recorded during sunspot maximum and computer conversion problems at the Meudon Observatory and at NGSDC have forced these greater delays on us.

For researchers who need the comprehensive solar flare data more promptly, NGSDC plans to generate in the next few weeks "preliminary" listings from November 1979 through the "current" month that lies 13 months from the month of observation. These complete tabulations will lack the final Meudon corrections, and will only be published after they have been made. Nevertheless, printouts for this period will be available on request, if they be recognized at "preliminary" when used in research projects. A fee may be charged for reproducing these data. Please contact the editor, Helen E. Coffey, at (303) 497-6223 or telex SOLTERWARN BLDR 45897.

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

SEPTEMBER 1980

DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
01	100	HIRA	43	NS	0218.4	0540	400.0D	230	30		SL
	200	GORK	44	NS	0354.0E		548.0D		10		
	100	GORK	44	NS	0354.0E		546.0D		10		
	29	UPIC	43	NS	0543.5	1224.7	549.6				
	33	UPIC	43	NS	0543.6	0706.8	549.1				
	127	TORN	43	NS	0600.0	1302.6	540.0	2000	4		V1
	204	IZMI	44	NS	0600.0E		360.0D	52			
	260	ONDR	44	NS	0644.0E		431.0D	219	10		
	200	HIRA	44	NS	2010.0E	2149	780.0D	60	15		
	100	HIRA	44	NS	2010.0E	2150	360.0D	30	5		ML
	3750	TYKW	21	GRF	0109.0	0123	70.0	2	1		
	2000	TYKW	20	GRF	0120.0	0132	40.0	2	.5		
	9400	TYKW	21	GRF	0125.0	0134	35.0	4	1		
	3750	TYKW	5	S	0129.0	0132	10.0	3	1		
	9400	TYKW	5	S	0143.0	0143.8	2.0	7	2		
	3750	TYKW	5	S	0202.0	0202.4	1.0	2.5	1		
	1000	TYKW	5	S	0202.0	0202.5	1.0	2	.5		
	9400	TYKW	5	S	0209.0	0209.7	2.0	3	1		
	2000	TYKW	5	S	0209.4	0209.6	4.0	2.5	.5		
	3750	TYKW	5	S	0209.4	0209.5	1.5	2.5	.5		
	3750	TYKW	21	GRF	0225.0	0229	105.0	4	1		
	9400	TYKW	5	S	0226.5	0228.7	3.5	16	3		
	9400	TYKW	29	PBI	0230.0		30.0	6	2		
	2000	TYKW	21	GRF	0239.0	0242	90.0	2	1		
	2000	TYKW	45	C	0330.6	0330.8	.6	2.5	.5		
	9400	TYKW	45	C	0339.0	0345.7	15.0	21	3		
	3750	TYKW	5	S	0340.0	0340.5	7.0	1.5	.5		
	1000	TYKW	45	C	0417.0	0418.0	2.0	14	3.5		
	2000	TYKW	21	GRF	0417.0	0525	150.0	2	1		
	3750	TYKW	21	GRF	0417.0	0433	150.0	6	2		
	3750	TYKW	5	S	0417.0	0417.7	3.0	16	4		
	9400	TYKW	21	GRF	0417.0	0433	55.0	6	1.5		
	9400	TYKW	45	C	0417.4	0417.8	5.5	5	2		
	2000	TYKW	5	S	0417.4	0417.8	2.0	9	2.5		
	5730	IRKU	1	S	0417.5	0417.7	1.5	14			R
	9100	GORK	23	GRF	0430.0U		480.0E	16			
	650	GORK	1	S	0431.7	0432.0	.3	4	2		
	6100	KISV	27	RF	0517.0	0621	81.0	8			
	9400	TYKW	45	C	0518.0	0527.2	25.0	22	5		
	3750	TYKW	45	C	0519.0	0523.9	23.0	6	2		
	650	GORK	40	F	0521.0		10.5	4			
	1000	TYKW	45	C	0526.7	0527.1	.7	7	2		
	9100	GORK	1	S	0526.8	0527.3	.9	13	6.5		
	5200	BERN	1	S	0541.5	0543.6	13.0	18.0			ONLY PAPER REC
	3200	BERN	1	S	0541.5	0543.6	13.0	.0			
	3100	CRIM	1	S	0542.0	0542.5	1.0	6	2		
	15000	KISV	8	S	0542.5	0543.7	3.0	25			
	6100	KISV	8	S	0543.0	0543.7	2.0	31			
	950	GORK	1	S	0543.0	0543.8	1.2	4			
	17000	NOBE	1	S	0543.2	0543.7	1.0	22			R
	5730	IRKU	2	S	0543.2	0543.5	.7	40			L
	9400	TYKW	45	C	0543.3	0543.7	12.0	38	4		
	200	GORK	8	S	0543.3	0543.6	.9	55 D			
	2000	TYKW	5	S	0543.3	0543.6	1.0	3.5	1		
	100	GORK	8	S	0543.3	0543.6	.9	1900 D			
	3750	TYKW	5	S	0543.4	0543.6	1.5	9	2		
	650	GORK	1	S	0543.5	0543.8	1.5	4.5			
	2950	GORK	1	S	0543.5	0543.7	.7	5.2	2.5		
	9100	GORK	2	S/F	0543.5	0543.7	.7	33	15		
	9400	TYKW	5	S	0603.0	0604.0U	1.0D	14 D	2 D		
	15000	KISV	8	S	0603.7	0604.2	1.0	18			
	9100	GORK	1	S	0603.8	0604.1	.7	8	4		
	9400	TYKW	30	PBI	0607.0E		40.0D	3 D	1.5D		
	650	GORK	40	F	0628.3		24.3	15			
	9400	TYKW	5	S	0639.0	0640.4	3.0	4	1.5		
	113	POTS	4	S/F	0639.5	0639.9	2.5	6000	200		III
	200	GORK	46	C	0639.6	0640.1	4.1	60 D			
	200	GORK			0639.6	0642.8		60 D			
	100	GORK			0639.8	0640.5		2300			
	234	POTS	4	S/F	0639.8	0639.9	.8	400	40		III
	100	GORK	45	C	0639.8	0639.9	1.0	2300			
	1000	TYKW	45	C	0640.0	0640.3	2.0	3	1		
	3750	TYKW	5	S	0640.0	0640.4	1.0	1.5	.5		
	204	IZMI	7	C	0640.0	0640.5	1.0	475	300		
	2000	TYKW	5	S	0640.1	0640.4	.6	3	1		
	1000	TYKW	42	SER	0648.5	0712.7	41.0	22	2		
	536	ONDR	42	SER	0650.0	0747.3	244.0	41			
	5200	BERN	1	S	0651.5	0653.7	21.0	12.0			ONLY PAPER REC
	3750	TYKW	45	C	0653.0	0653.9	15.0	5	2		
	6100	KISV	4	S/F	0653.5	0654.7	3.0	12			
	1470	POTS	40	F	0656.0	0701.8	12.0	6.5			
	9500	POTS	40	F	0656.0	0701.8	12.0	14			
	6100	KISV	4	S/F	0659.0	0701.7	4.0	14			
	15000	KISV	3	S	0700.0	0701.2	4.0	13			

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
01	9400	TYKW	45 C	0700.0	0701.7	3.0	14	3		
	113	POTS	4 S/F	0700.0	0701.7	2.6	2000	20		III
	234	POTS	8 S	0701.3	0701.6	.6	1700	600		III
	9100	GORK	1 S	0701.5	0701.7	.8	13	6.5		
	204	IZMI	41 F	0701.5	0705.3	6.0	775			
	15000	KISV	1 S	0706.0	0707	3.0	7			
	200	GORK	8 S	0706.2	0707.0	1.3	280 D			
	3000	POTS	1 S	0706.5	0706.8	2.0	5.1			
	100	GORK	8 S	0706.7U	0706.9	.8U	2300 D			
	3750	TYKW	20 GRF	0717.0	0723	70.0	4.5	2		
	2000	TYKW	20 GRF	0720.0	0750	70.0	3 U	1.5U		
	1000	TYKW	42 SER	0735.5	0740.0	8.0	21	2		
	930	BORD	46 C	0739.9	0740.2	.6	25	4		
	2950	GORK	1 S	0740.0	0740.2	.6	2.3	1.1		
	1000	TYKW	45 C	0757.0	0757.4	.6	7	1.5		
	650	GORK	22 GRF	0815.0	0924.0	162.0	22			
	2950	GORK	20 GRF	0831.0	0833.0	25.0	3.1	1.5		
	234	POTS	4 S/F	0846.6	0846.7	.4	240	10		III
	1000	TYKW	45 C	0849.0	0849.4	1.5	19 U	2 U		
	9500	POTS	40 F	0919.0	0921.4	7.0	8.2			
	5200	BERN	21 GRF	0919.0	0946.2	51.0	12.0			ONLY PAPER REC
	9500	POTS		0919.0	0924.3		8.2			
	3200	BERN	21 GRF	0919.0	0940.1	51.0	.0			ONLY PAPER REC
	3100	CRIM	1 S	0919.0	0919.5	2.0	5	1		
	6100	KISV	46 C	0919.0	0946.5	37.0	16			
	6100	KISV		0919.0	0921.5		11			
	6100	KISV		0919.0	0939.5		13			
	6100	KISV		0919.0	0953.5		12			
	6100	KISV		0919.0	0924		8			
	1470	POTS	40 F	0920.0	0921.5	7.5	16			
	3000	POTS	40 F	0920.0	0921.4	5.0	6.0			
	113	POTS	41 F	0920.5	0923.6	4.5	350	10		III
	2950	GORK	1 S	0920.6	0921.4	1.4	3.5	1.5		
	234	POTS	42 SER	0920.8	0922.2	3.1	170	3		III
	9100	GORK		0921.0	0924.0		8			
	9100	GORK	45 C	0921.0	0921.2	3.8	8			
	930	BORD	46 C	0923.4	0923.9	1.0	21	3		
	950	GORK	1 S	0923.7	0924.0	.9	6			
	100	GORK	41 F	0935.4	0935.8	5.0	220 D			
	100	GORK		0935.4	0936.5		220			
	100	GORK		0935.4	0938.5		220 D			
	3000	POTS	21 GRF	0938.0	0953.5	92.0	25			
	9500	POTS	20 GRF	0938.0	0946	82.0	14			
	930	BORD	41 F	0940.0	0940.8	1.2	15	2		
	1470	POTS	20 GRF	0948.0	1008.4	82.0	3.9			
	2950	GORK	1 S	0953.3	0953.4	.6	3.5	1.5		
	3100	CRIM	3 S	1038.0	1038.2	2.0	17	5		
	6100	KISV	4 S/F	1039.0	1040	2.0	14			
	2650	DWIN	1 S	1039.0	1040	2.0	15	10		
	2950	GORK		1039.1	1045.1		11.2			
	2950	GORK	45 C	1039.1	1039.7	9.7	14.3			
	3000	POTS	1 S	1039.5	1039.9	1.5	18			
	5200	BERN	41 F	1039.5	1040.0	8.0	13.0			ONLY PAPER REC
	3200	BERN	41 F	1039.5	1040.0	8.0	.0			ONLY PAPER REC
	3100	CRIM	1 S	1043.0	1043.5	1.0	11	3		
	6100	KISV	8 S	1044.5	1045	1.0	15			
	10715	DWIN	1 S	1045.0	1045	1.0	10	5		
	15000	KISV	8 S	1045.0	1045	1.0	16			
	1470	POTS	21 GRF	1115.0	1137	95.0	3.9			
	3000	POTS	20 GRF	1121.0	1127	44.0	5.9			
	5200	BERN	21 GRF	1121.2	1123.2	36.0	5.0			ONLY PAPER REC
	9500	POTS	29 PBI	1122.0	1123	61.0	15			
	6100	KISV	4 S/F	1122.5	1123	3.0	9			
	9100	GORK	2 S/F	1122.7	1123.0	.9	13	6.5		
	1470	POTS	4 S/F	1215.0	1215.9	2.0	6.5			
	6100	KISV	1 S	1215.0	1216	3.0	7			
	1470	POTS	4 S/F	1223.0	1223.2	4.0	22			
	113	POTS	41 F	1224.3	1225.8	2.3	600	60		III
	930	BORD	41 F	1224.4	1224.5	1.2	16	3		
	234	POTS	4 S/F	1225.6	1225.8	.4	400	25		III
	2800	OTTA	22 GRF	1245.0	1415	160.0	8.0			
	234	POTS	42 SER	1253.6	1253.7	14.0	350	2		III
	650	GORK		1255.3	1256.3		8.5			
	650	GORK	45 C	1255.3	1255.5	4.8E	10.5			
	113	POTS	4 S/F	1303.1	1303.4	.7	350	35		III
	234	POTS	4 S/F	1328.7	1328.8	.5	400	60		
	234	POTS	4 S/F	1338.1	1338.3	.3	150	15		
	1470	POTS	3 S	1347.5	1348.4	1.5	9.4			
	1470	POTS	4 S/F	1359.0	1359.4	2.0	21			
	234	POTS	8 S	1359.4	1359.4	.1	380	130		
	2800	OTTA	20 GRF	1530.0	1535	49.0	2.4	1.6		
	2800	OTTA	21 GRF	1620.0	1644	95.0	4.8	2.4		
	2800	OTTA	1 S	1620.2	1621.3	1.5	4.0	2.0		
	2800	OTTA	8 S	1657.0	1657.1	.6	6.0	3.2		
	2800	OTTA	45 C	1723.4	1723.5	2.0	20.0	2.8		

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
01	2800	OTTA	2B GRF	1815.0	1830	35.0	2.4	1.2		
	2800	OTTA	21 GRF	1852.0	1903	20.0	3.2	1.4		
	2800	OTTA	2 S/F	1854.5	1855.6	1.5	2.4	1.2		
	2800	OTTA	21 GRF	1927.0	1950	90.0	5.2	2.6		
	9400	HUAN	S	1927.8	1942.3	39.2	7.9	6.0		B
	2800	OTTA	40 F	1928.0	1946.6	18.0	110.0			
	2695	PENT	8 S	2011.0	2011	.1	40.0			
	2800	OTTA	8 S	2025.7	2026	.3	13.0			
	2800	OTTA	8 S	2037.5	2037.5	.2	2.0			
	2800	OTTA	8 S	2042.3	2042.7	.5	24.8			
	2800	OTTA	8 S	2127.5	2127.5	.5	4.8	1.4		
	2800	OTTA	8 S	2139.0	2139.2	.4	3.0			
	2800	OTTA	240AF	2145.0	2204	19.0	5.4	2.7		
	2000	TYKW	8 S	2146.8	2146.9	.2	8	3		
	2800	OTTA	40 F	2150.2	2159.5	13.0	153.0			
	2000	TYKW	45 C	2150.3	2151.7	1.5	40	4		
	1000	TYKW	8 S	2150.9	2151.0	.4	4 U	1.5U		
	2000	TYKW	8 S	2153.5	2153.6	.2	4	1		
	2000	TYKW	8 S	2156.9	2157.0	.2	7	2		
	2000	TYKW	8 S	2158.0	2158.1	.2	39	10		
	2000	TYKW	8 S	2201.2	2201.3	.2	10	4		
	2000	TYKW	8 S	2202.4	2202.4	.4	11	4		
	2695	PENT	23 GRF	2205.0	2230	55.0	3.2	1.6		
	2695	PENT	8 S	2237.0	2237	.1	4.8			
	2695	PENT	8 S	2250.2	2250.3	.2	24.0			
	2000	TYKW	8 S	2250.3	2250.4	.3	36	10		
	2000	TYKW	8 S	2251.0	2251.1	.4	16	3		
	2695	PENT	8 S	2251.0	2251.1	.2	12.0			
	2000	TYKW	8 S	2312.1	2312.2	.2	5	1.5		
	2000	TYKW	5 S	2318.0	2318.5	2.0	78	5		
	2695	PENT	8 S	2318.4	2318.5	.1	13.4			
	2695	PENT	40 F	2329.2	2329.9	1.8	66.0			
	2000	TYKW	45 C	2329.3	2330.7	2.1	138	15		
	3750	TYKW	5 S	2330.0	2330.5	1.0	4.5	1.5		
	2000	TYKW	45 C	2342.0	2342.4	2.5	133	10		
	2695	PENT	8 S	2342.0	2342.3	.5	42.0			
	2695	PENT	8 S	2343.9	2343.9	.5	3.0			
	2000	TYKW	45 C	2348.8	2350.1	1.5	80	5		
	2695	PENT	8 S	2349.9	2350.1	.3	71.0			
	2000	TYKW	45 C	2355.0	2355.7	1.5	19	3		
02	200	GORK	44 NS	0400.0E		540.0D		15		
	260	ONDR	44 NS	0550.0E		496.0D	71	11		
	204	IZMI	44 NS	0600.0E		360.0D	80			
	127	TORN	44 NS	0830.0E	0857.4	450.0D	2400	4		V1,DISTURBED
	33	UPIC	43 NS	1029.8	1126.5	390.2D				
	29	UPIC	43 NS	1029.9	1126.5	390.1D				
	100	GORK	43 NS	1118.0		102.0		5		
	200	HIRA	44 NS	2010.0E	2140	300.0D	5	3		
	2000	TYKW	45 C	0010.7	0011.2	1.0	92	10		
	2000	TYKW	21 GRF	0015.0	0141	175.0	3.5	1.5		
	1000	TYKW	21 GRF	0015.0	0100	150.0	1	.5		
	3750	TYKW	45 C	0015.0	0016.4	10.0	3.5	1		
	200	HIRA	46 C	0015.2	0016.3	2.3	235	70		WR
	1000	TYKW	45 C	0015.7	0016.0	1.0	12	4		
	2000	TYKW	45 C	0016.0	0016.5	1.0	6	2		
	2695	PENT	8 S	0016.2	0016.3	.1	3.6	1.8		
	2000	TYKW	45 C	0021.4	0023.1	2.0	57	6		
	2695	PENT	8 S	0022.9	0023	.4	28.0			
	2000	TYKW	5 S	0027.0	0027.3	.6	6	1.5		
	2695	PENT	8 S	0037.0	0037.1	.2	3.0			
	1000	TYKW	45 C	0045.5	0046.5	2.5	5	1.5		
	3750	TYKW	5 S	0108.0	0111.8	9.0	23	6		
	2000	TYKW	45 C	0109.0	0111.6	8.0	22	3		
	9400	TYKW	5 S	0110.0	0111.7	5.0	43	11		
	1000	TYKW	45 C	0111.0	0111.7	5.0	16	3		
	2695	PENT	1 S	0111.0	0111.8	2.0	8.4	4.2		
	5730	IRKU	2 S	0111.0	0111.7	3.0	150			R
	9400	TYKW	29 PBI	0115.0		50.0	4	1.5		
	3750	TYKW	30 PBI	0117.0		108.0	3.5	2		
	3750	TYKW	5 S	0138.0	0142	15.0	3	1.5		
	3750	TYKW	5 S	0242.0	0250	23.0	4.5	2.5		
	1000	TYKW	32 ABS	0300.0	0320	100.0	-1	-.5		
	9400	TYKW	5 S	0301.4	0301.8	2.0	6	1.5		
	3750	TYKW	31 ABS	0305.0	0340	80.0	-4	-2		
	2000	TYKW	31 ABS	0310.0	0330	68.0	-1	-.5		
	9400	TYKW	5 S	0312.3	0312.6	1.5	8	2.5		
	9400	TYKW	32 ABS	0320.0	0350	80.0	-4	-2		
	2000	TYKW	21 GRF	0418.0	0500 U	220.0	3.5	1.5U		INTERFERENCE
	3750	TYKW	21 GRF	0425.0	0500 U	210.0	6	3 U		INTERFERENCE
	9100	GORK	23 GRF	0435.7	1137.0	475.0E	28			
	9400	TYKW	21 GRF	0450.0U	0500 U	180.0U	6	3 U		INTERFERENCE
	2950	GORK	20 GRF	0450.0	0524.0	75.0	5.1	2.5		
	100	GORK		0515.0	0516.9		150 D			
	100	GORK		0515.0	0516.6		150 D			

SOLAR RADIO EMISSION
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SEPTEMBER 1980

DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
02	100	GORK	46 C	0515.0	0515.6	2.3	150 D			
	234	POTS	44 GRF	0525.0E	0724	575.0D	40			
	6100	KISV	27 RF	0620.0	0700	76.0	18			
	2950	GORK	21 GRF	0624.0	0654.5	84.0	12	6		
	3200	BERN	21 GRF	0631.3	0641.0	78.0	.0			ONLY PAPER REC
	9400	TYKW	45 C	0632.0	0700	65.0	15	6		INTERFERENCE
	2000	TYKW	45 C	0633.0	0647.7U	60.0	6	2		INTERFERENCE
	3750	TYKW	45 C	0633.0	0647.0	80.0	21	6		
	11000	BERN	21 GRF	0634.0	0656.4	88.0	11.0			
	8400	BERN	21 GRF	0634.0	0655.9	88.0	17.0			
	5200	BERN	21 GRF	0634.0	0648.0	85.0	19.0			
	2953	GORK	1 S	0637.3	0637.5	1.3	4.5	2.5		
	3100	CRIM	20 GRF	0644.0	0655.0	55.0	14	5		
	6100	KISV	4 S/F	0644.0	0648	8.0	13			
	9500	POTS	20 GRF	0645.0E	0656	70.0D	22			
	3000	POTS	20 GRF	0645.0E	0646	80.0D	34			
	2950	GORK	1 S	0645.4	0645.5	3.2	3	1.5		
	6100	KISV	1 S	0652.0	0656	6.0	14			
	9100	GORK		0655.6	0655.8	1.0	8	3		
	234	POTS	4 S/F	0718.2	0718.7	.8	360	10		
	9100	GORK		0951.2	0954.7		28			
	9100	GORK	46 C	0951.2	0951.9	6.3	8.7			
	11000	BERN	1 S	0954.1	0955.1	2.0	27.0			
	5200	BERN	1 S	0954.1	0955.1	3.0	5.0			
	8400	BERN	1 S	0954.1	0955.0	2.0	22.0			
	9500	POTS	3 S	0954.5	0954.8	6.5	23			
	234	POTS	8 S	0954.9	0954.9	.1E	575	200		
	6100	KISV	4 S/F	0956.0	0957	4.0	13			
	3000	POTS	3 S	1003.7	1004.0	1.1	17			
	1470	POTS	3 S	1003.8	1004.3	2.2	7.2			
	2950	GORK	1 S	1003.8	1004.1	1.0	12	6.0		
	5200	BERN	1 S	1003.8	1004.3	2.0	8.0			
	950	GORK	1 S	1003.8	1004.1	1.4	3.4			
	3200	BERN	1 S	1004.1	1004.5	3.5	.0			ONLY PAPER REC
	536	ONDR	8 S	1004.8	1004.8	.3	176			
	11000	BERN	3 S	1012.0	1018.0	32.0	233.0			
	8400	BERN	3 S	1014.0	1017.8	27.0	72.0			
	9100	GORK	3 C	1014.3	1017.9	6.6	130			
	5200	BERN	3 S	1016.0	1018.0	13.0	11.0			
	6100	KISV	4 S/F	1016.0	1018	6.0	30			
	10715	DWIN	4 S/F	1016.0	1018	5.0	85	40		
	9500	POTS	3 S	1016.0	1017.5	7.0	138			
	15000	KISV	8 S	1017.0	1018	4.0	149			
	35000	BERN	3 S	1017.1	1018.0	3.0	100.0			
	19600	BERN	3 S	1017.1	1018.0	21.0	193.0			
	5200	BERN	41 F	1040.0	1312.9	195.0	24.0			
	11000	BERN	41 F	1040.0	1108.8	195.0	17.0			
	3200	BERN	41 F	1040.0	1312.3	200.0	.0			ONLY PAPER REC
	8400	BERN	41 F	1040.0	1316.9	195.0	18.0			
	9500	POTS	22 GRF	1057.0	1108.5	18.0	13			
	234	POTS	4 S/F	1119.6	1119.8	.3	100	10		
	6100	KISV	27 RF	1130.0	1137	14.0	12			
	2800	OTTA	240 R	1130.0	1135	5.0	6.2			
	930	BORD	41 F	1152.0	1155.4	6.0	12	2		
	536	ONDR	42 SER	1159.0	1312.7	88.0	14			
	6100	KISV	1 S	1213.0	1213.5	2.0	10			
	2800	OTTA	23 GRF	1307.0	1325	130.0	8.0	4.4		
	3000	POTS	4 S/F	1310.0	1312.4	5.0	50			
	9500	POTS	22 GRF	1310.0	1317	35.0	16			
	2650	DWIN	2 S/F	1310.0	1312	6.0	40	25		
	3100	CRIM	3 S	1310.0	1312.5	6.0	32	10		
	2800	OTTA	4 S/F	1310.0	1313	8.0	42.0	14.0		
	3000	POTS		1310.0	1313.0		50			
	1470	POTS	4 S/F	1310.5	1312.0	4.5	70			
	808	ONDR	45 C	1310.5	1311.3	4.0	35	8		
	930	BORD	46 C	1310.5	1311.8	3.5	112	4		
	9400	HUAN	S	1316.3	1317.0	2.3	19.4	9.5		L
	9400	HUAN	29 PBI	1318.6	1318.6	23.2	3.5	1.2		L
	234	POTS	4 S/F	1318.9	1319.2	.4	300	7		
	1470	POTS	40 F	1436.0	1437.8	7.0	6.3			
	930	BORD	41 F	1439.0	1439.2	.8	73	2		
	2800	OTTA	8 S	1603.8	1604	.5	4.2	2.0		
	2800	OTTA	23 GRF	1620.0	1645	190.0	18.8	4.0		
	5200	BERN	20 GRF	1629.5	1645.9	36.0	9.0			
	3200	BERN	20 GRF	1629.5	1631.5	36.0	.0			ONLY PAPER REC
	2800	OTTA	3 S	1630.0	1631.5	5.0	12.0	4.0		
	9400	HUAN	S	1800.6	1811.8	48.9	12.3	4.7		L
	2800	OTTA	3 S	1806.0	1806.6	3.0	12.0	4.0		
	2800	OTTA	260 FAL	1945.0	2110	95.0	-6.2	-3.1		
	2800	OTTA	1 S	2133.0	2135.3	3.0	4.6	2.2		
	9400	TYKW	5 S	2134.0	2135	6.0	6	2		
	2000	TYKW	5 S	2134.0	2135	6.0	3	1		
	3750	TYKW	5 S	2134.0	2135	6.0	3	1		
	3750	TYKW	21 GRF	2200.0	2230	180.0	11	5		
	2695	PENT	22 GRF	2200.0	2230	140.0	8.0	3.4		

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
02	9400	TYKW	21 GRF	2215.0	2230	150.0	12	4		
	2800	TYKW	20 GRF	2220.0	2230	160.0	5	1.5		
	9400	TYKW	5 S	2243.0	2245.5	6.0	4.5	1.5		
03	200	HIRA	43 NS	0321.0	0425	340.0D	20	10		WL
	200	GORK	44 NS	0400.0E		535.0D		10		
	100	GORK	44 NS	0400.0E		267.0D		5		
	260	ONDR	44 NS	0600.0E		483.0D	34	2		
	33	UPIC	43 NS	0951.4	1500.2	302.2				
	29	UPIC	43 NS	0951.5	1500.5	389.7				
	200	HIRA	44 NS	2357.0E	0751	550.0D	40	15		WL
	2695	PENT	260 PAL	0025.0	0120	55.0	-6.8	-3.4		
	3750	TYKW	5 S	0135.0	0138.4	15.0	4.5	1.5		
	2800	TYKW	5 S	0135.0	0139	15.0	1.5	.7		
	9400	TYKW	5 S	0136.0	0138.4	9.0	9	2		
	1000	TYKW	45 C	0137.8	0138.5	1.2	25	7		
	3750	TYKW	20 GRF	0213.0	0220.2	45.0	4	1.5		
	9400	TYKW	5 S	0215.0	0215.6	1.5	7	1.5		
	9400	TYKW	5 S	0219.0	0220.1	2.0	22	7		
	9400	TYKW	29 PBI	0221.0		30.0	5	2		
	3750	TYKW	28 PRE	0315.0	0350	35.0	3	1.5		
	9400	TYKW	5 S	0317.0	0318.4	10.0	10	3		
	1000	TYKW	28 PRE	0325.0	0350	25.0	1	.5		
	2800	TYKW	28 PRE	0335.0	0350	15.0	2	1		
	1000	TYKW	45 C	0350.0	0400.2	70.0	39	5		
	3750	TYKW	45 C	0350.0	0400.5	60.0	100	14		
	9400	TYKW	45 C	0350.0	0400.2	75.0	68	14		
	2800	TYKW	45 C	0350.0	0400.3	22.0	35	4		
	650	GORK	21 GRF	0404.9	0427.0	35.0	15			
	950	GORK	21 GRF	0405.1		30.6				
	650	GORK		0405.2	0400.2		25			
	950	GORK	45 C	0405.2	0406.4	4.5	19			
	17000	NOBE	20 GRF	0405.3	0419.1	40.0	26			0
	200	GORK	46 C	0407.0	0400.1	6.0	45			
	200	GORK		0407.0	0412.0		60			
	200	GORK		0407.0	0413.5		65			
	100	GORK		0407.6	0412 U		80 D			
	100	GORK		0407.6	0417.7		35			
	100	GORK	41 F	0407.6	0407.9	10.2	35			
	650	GORK	3 S	0407.7	0400.0	1.4	44	22		
	2800	TYKW	30 PBI	0412.0		230.0D	8	3 D		
	3750	TYKW	30 PBI	0450.0		190.0D	9	4 D		
	1000	TYKW	29 PBI	0500.0		180.0D	5	3 D		
	6100	KISV	27 RF	0500.0	0521	33.0	5			
	3750	TYKW	21 GRF	0510.0	0520	40.0	4	2		
	2800	TYKW	20 GRF	0510.0	0511	30.0	3.5	1		
	9400	TYKW	20 GRF	0510.0	0520	50.0	6	3		
	3750	TYKW	5 S	0510.5	0511.2	1.5	4	1		
	100	GORK	8 S	0515.6	0517.2	2.0	180 D			
	100	GORK		0532.1	0536.2		180 D			
	100	GORK		0532.1	0533.4		180 D			
	100	GORK	41 F	0532.1	0532.3	4.4	180 D			
	100	GORK		0532.1	0535.0		185			
	6100	KISV	1 S	0533.5	0534	2.0	6			
	113	POTS	4 S/F	0551.1	0551.2	.9	100	20		
	11800	BERN	20 GRF	0600.0	0635.3	190.0	16.0			ONLY PAPER REC
	8400	BERN	20 GRF	0600.0	0635.1	190.0	19.0			ONLY PAPER REC
	5200	BERN	20 GRF	0600.0	0635.6	205.0	12.0			ONLY PAPER REC
	3100	CRIM	29 PBI	0612.0	0936.0		6			
	3750	TYKW	20 GRF	0620.0	0635	70.0	5	1.5		
	6100	KISV	4 S/F	0627.0	0635	19.0	24			
	9400	TYKW	45 C	0629.0	0635	35.0	10	3		
	9100	GORK	20 GRF	0630.0U	0634.0	13.0U	12	5		
	9100	GORK	20 GRF	0735.8	0750.6	39.2	13	6		
	9500	POTS	20 GRF	0738.0	0752.5	42.0	12			
	200	GORK		0746.0	0758.3		70 D			
	200	GORK	41 F	0746.0	0746.8	13.4	70 D			
	200	GORK		0746.0	0754.0		70 D			
	234	POTS	4 S/F	0750.8	0751.0	.2	200	10		
	1000	TYKW	45 C	0835.5	0835.9U	1.0	13 U	3 U		
	113	POTS	42 SER	0940.3	0951.7	12.0	100	1 E		III
	113	POTS	42 SER	1041.4	1045.2	3.9	100	1 E		
	113	POTS	41 F	1124.6	1126.8	2.4	700	25		III
	100	GORK	41 F	1125.4	1125.5	2.1	105			
	100	GORK		1125.4	1127.1		300 D			
	5200	BERN	20 GRF	1145.0	1206.3	80.0	10.0			
	8400	BERN	20 GRF	1145.5	1215.5	80.0	12.0			
	9500	POTS	20 GRF	1205.0	1215.5	40.0	12			
	9100	GORK	20 GRF	1206.0	1213.7	14.9	10			
	234	POTS	4 S/F	1333.9	1334.3	.6	170	20		III
	8400	BERN	20 GRF	1340.0	1421.5	110.0	52.0			
	5200	BERN	20 GRF	1340.0	1421.7	110.0	13.0			
	3200	BERN	20 GRF	1344.0	1353.0	105.0	.0			ONLY PAPER REC
	2800	OTTA	20 GRF	1345.0	1352	105.0	6.6	3.3		
	9400	HUAN	S	1348.0	1429.0	68.4	14.5	8.0		L

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
03	19600	BERN	20	GRF	1349.0	1421.5	120.0	23.0			
	11800	BERN	20	GRF	1349.0	1421.5	120.0	35.0			
	9500	POTS	4	S/F	1420.0	1421.5	17.0	51			
	10715	DWIN	2	S/F	1420.0	1421	7.0	20	10		
	9400	HUAN		F	1421.3	1422.5	6.7	67.9	18.9		L
	9400	HUAN			1421.3	1425.8		21.0			L
	2800	OTTA	4	S/F	1922.0	1929	14.5	101.0	31.0		
	9400	HUAN			1924.5	1929.7		109.9			L
	9400	HUAN			1924.5	1929.3		90.5			L
	9400	HUAN		F	1924.5	1928.6	8.2	95.3	48.0		L
	9400	HUAN	29	PBI	1932.7	1932.7	15.9	21.0	8.7		L
	2800	OTTA	29	PBI	1936.5	1936.5	53.0	11.0	5.5		
	2800	OTTA	23	GRF	2040.0	2100	80.0	6.6	3.3		
	1000	TYKW	45	C	2050.0E	2056.9U	40.0D	115 U	8 D		
	2800	OTTA	1	S	2055.0	2057	4.0	6.6	3.3		
	9400	HUAN		S	2143.7	2145.7	3.0	12.9	6.2		L
	9400	TYKW	21	GRF	2215.0	2320	110.0	10	5		
	9400	TYKW	5	S	2220.0	2220.3	2.0	4	1.5		
	2695	PENT	21	GRF	2220.0	2330	120.0	12.2	6.2		
	3750	TYKW	21	GRF	2230.0	2320	110.0	10	5		
	2000	TYKW	21	GRF	2257.0	2258	65.0	3	1		
	2695	PENT	1	S	2301.0	2302.2	5.0	6.0	3.0		
	3750	TYKW	5	S	2301.5	2302.1	3.0	8	3		
	9400	TYKW	45	C	2322.0	2328.0	25.0	40	6		
	3750	TYKW	45	C	2323.0	2324.1	30.0	13	2.5		
	1000	TYKW	45	C	2323.7	2323.8	.7	10	4		
	2000	TYKW	5	S	2324.0	2324.2	1.0	7	2		
	2695	PENT	1	S	2324.0	2324.2	1.0	8.2	4.2		
04	200	GORK	44	NS	0347.0E		553.0D		20		
	100	GORK	44	NS	0350.0E		202.0D		5		
	234	POTS	44	NS	0535.0E	0738	588.0D	100			
	260	ONDR	44	NS	0554.0E		511.0D	27	3		
	204	IZMI	44	NS	0600.0E		360.0D	58			
	127	TORN	44	NS	0640.0E	0824.3	500.0D	80			V1
	200	HIRA	44	NS	2010.0E	2142	310.0D	30	9		
	3750	TYKW	28	PRE	0050.0	0155	65.0	20	12		
	9400	TYKW	28	PRE	0050.0	0122	65.0	16	9		
	2000	TYKW	28	PRE	0050.0	0130	66.0	7	4		
	17000	NOBE	3	S	0154.8	0201.4	9.5	526			0
	9400	TYKW	47	GB	0155.0	0201.4	14.0	98.5	200		
	3750	TYKW	45	C	0155.0	0201.5	15.0	400	100		
	1000	TYKW	45	C	0156.0	0201.9	14.0	190	40		
	2000	TYKW	45	C	0156.0	0201.8	14.0	350	80		
	35000	NAGO	5	S	0158.0	0201	6.0	303			
	500	HIRA	41	F	0158.7	0204.0	11.0	230			0
	35000	NAGO	29	PBI	0204.0	0212	47.0	97			
	17000	NOBE	29	PBI	0204.3	0204.4	84.0	62			0
	200	HIRA	48	C	0208.0	0232.6	232.0U	160	43 U		WL
	500	HIRA	27	RF	0210.0	0308.6	298.0	90	45		ML,WR
	3750	TYKW	30	PBI	0210.0		350.0	45	10		
	2000	TYKW	30	PBI	0210.0		350.0	26	8		
	1000	TYKW	30	PBI	0210.0		350.0	15	7		
	9400	TYKW	30	PBI	0210.0		350.0	55	12		
	100	HIRA	48	C	0216.3	0256.7	220.0U	430	120 U		0
	1000	TYKW	45	C	0218.0	0249.0	100.0	75	8		
	3750	TYKW	45	C	0242.0	0249.0	12.0	28	6		
	2000	TYKW	45	C	0243.0	0249.1	10.0	26	6		
	500	HIRA	6	S	0243.6	0243.7	1.0	40	20		0
	500	HIRA	46	C	0248.3	0248.5	.7	280	200		MR
	650	GORK	22	GRF	0348.0E		208.0D	12			
	3750	TYKW	21	GRF	0350.0	0420	230.0	12	6		
	2000	TYKW	20	GRF	0400.0	0418	120.0	3	1.5		
	9400	TYKW	20	GRF	0405.0	0418	60.0	10	3		
	950	GORK	3	S	0435.4	0435.7	.6	18			
	29	UPIC	42	SER	0549.6	0550.1	13.3				
	33	UPIC	42	SER	0549.7	0549.8	12.0				
	536	ONDR	41	F	0554.0E	0613.3	35.0D	56	13		
	11800	BERN	21	GRF	0626.0	0656.7	120.0U	13.0			
	5200	BERN	21	GRF	0626.0	0657.7	400.0	22.0			
	8400	BERN	21	GRF	0626.0	0656.9	120.0U	15.0			
	3200	BERN	21	GRF	0626.0	0657.8	400.0	.0			ONLY PAPER REC
	3750	TYKW	45	C	0636.5	0637.2	7.0	9	3		
	2950	GORK	1	S	0636.7	0637.2	4.6	3.9	1.9		
	536	ONDR	41	F	0638.0	0737.8	82.0	25	12		
	3750	TYKW	45	C	0653.0	0657.8	30.0	26	5		
	2000	TYKW	45	C	0653.0	0657.9	30.0	9	2		
	2950	GORK	21	GRF	0654.8	0656.2	23.0	5.0	2.5		
	9400	TYKW	45	C	0655.0	0656.9	4.0	15	4		
	6100	KISV	46	C	0656.0	0656.7	3.0	14			
	1470	POTS	2	S/F	0656.0	0657	2.5	2.7			
	6100	KISV			0656.0	0657.7		10			
	3000	POTS	4	S/F	0656.0	0658.1	3.0	27			
	6100	KISV			0656.0	0657		13			
	2950	GORK	4	S/F	0656.3	0657.8	2.4	16.5	8		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
04	9100	GORK	20	GRF	0656.7	0657.0	12.3	14			
	9400	TYKW	29	PBI	0659.0		50.0	5	2		
	113	POTS	4	S/F	1054.8	1055.5	.7	700	200		III
	29	UPIC	42	SER	1055.0	1055.1	68.4				
	33	UPIC	42	SER	1055.1	1055.1	68.3				
	6100	KISV	4	S/F	1057.0	1057.5	1.0	5			
	9100	GORK	1	S	1057.3	1057.5	1.3	14			
	6100	KISV	8	S	1106.0	1106.2	.3	11			
	930	BORD	41	F	1252.3	1252.6	.6	25	2		
	234	POTS	41	F	1357.6	1400.4	4.0	300	2		III
	234	POTS	41	F	1438.1	1439.4	3.2	230	5		III
	9400	HUAN		S	1703.0	1715.1	55.2	13.9	5.3		L
	2800	OTTA	21	GRF	2010.0	2220	190.0	7.4	3.4		
	2800	OTTA	1	S	2112.0	2115	6.0	4.0	2.0		
	9400	HUAN		S	2134.5	2138.2	7.5	19.2	11.7		L
	9400	TYKW	45	C	2135.0	2138.1	15.0	30	5		
	2800	OTTA	2	S/F	2156.0	2203	10.0	3.0	1.7		
	9400	TYKW	45	C	2214.0	2216.9	10.0	194	40		
	3750	TYKW	45	C	2214.0	2216.9	7.0	15	6		
	17000	NOBE	21	GRF	2214.4	2223.7	42.0	21			0
	9400	HUAN		F	2214.7	2216.7	4.3	183.1	80.2		L
	2800	OTTA	1	S	2215.5	2217	3.0	2.2	1.6		
	17000	NOBE	7	C	2216.5	2217.3	1.4	36			0
	3750	TYKW	29	PBI	2221.0		25.0	5	2.5		
	9400	TYKW	29	PBI	2224.0		25.0	17	7		
05	200	GORK	43	NS	0358.0		110.0		5		
	260	ONDR	44	NS	0546.0E		503.0D	138			
	33	UPIC	43	NS	0944.0	1241.4	294.5				
	29	UPIC	43	NS	0944.3	1241.8	294.5				
	9400	TYKW	5	S	0037.0	0038	3.0	6	2		
	1000	TYKW	45	C	0037.8	0037.9	.8	5	1		
	3750	TYKW	5	S	0207.0	0208.2	5.0	6	2		
	2000	TYKW	21	GRF	0215.0	0350	180.0	3.5	2		
	9400	TYKW	20	GRF	0218.0	0231	35.0	4	2		
	3750	TYKW	21	GRF	0220.0	0244	60.0	5	2		
	1000	TYKW	5	S	0223.0	0223.9	2.0	18	6		
	2000	TYKW	5	S	0223.0	0223.9	2.0	14	4		
	3750	TYKW	5	S	0223.0	0224	2.0	2.5	1		
	3750	TYKW	45	C	0228.0	0231.0	4.0	9	2		
	2000	TYKW	5	S	0228.0	0228.6	1.5	2.5	1		
	1000	TYKW	5	S	0228.5	0228.9	1.5	6	1.5		
	2000	TYKW	5	S	0230.0	0230.9	1.5	4	1		
	3750	TYKW	20	GRF	0325.0	0350	110.0	3	1.5		
	9100	GORK	1	S	0436.8	0437.1	.8	8	4		
	2000	TYKW	20	GRF	0540.0	0553.5	70.0	4	1.5		
	3750	TYKW	20	GRF	0540.0	0554	60.0	4	2		
	9400	TYKW	20	GRF	0550.0	0554	40.0	3	1.5		
	6100	KISV	1	S	0712.7	0712.8	.4	2			
	6100	KISV	4	S/F	0717.5	0717.7	1.0	3			
	3200	BERN	1	S	0806.5	0807.6	10.0	.0			ONLY PAPER REC
	650	GORK	1	S	0951.0	0952.7	3.0	2			
	5200	BERN	1	S	1019.3	1020.7	11.0	6.0			ONLY PAPER REC
	3200	BERN	1	S	1019.3	1020.7	11.0	.0			ONLY PAPER REC
	3100	CRIM	31	ABS	1019.5	1020.0	2.0	12	4		
	2650	DWIN	1	S	1020.0	1020.5	1.0	15	10		
	9500	POTS	1	S	1020.0	1020.5	1.4	4.0			
	1470	POTS	3	S	1020.0	1020.7	1.5	7.1			
	3000	POTS	3	S	1020.0	1020.7	1.4	14			
	6100	KISV	3	S	1020.0	1020.5	1.0	9			
	2950	GORK	1	S	1020.0	1020.5	1.0	9.5	4.5		
	9100	GORK	1	S	1020.1	1020.4	.8	6.5	3		
	650	GORK	1	S	1020.2	1020.5	3.0	3			
	950	GORK	1	S	1020.4	1020.7	.7	4			
	3100	CRIM	24	R	1133.0	1200.0		7			
	113	POTS	4	S/F	1241.4	1241.5	.9	100	25		III
	100	GORK	5	C	1241.4	1241.5	1.1	370	D		
	100	GORK			1241.4	1241.7		320			
	536	ONDR	42	SER	1318.0	1346.8	31.0	396			
	234	POTS	8	S	1319.4	1319.4	.2	220	70		III
	2800	OTTA	1	S	1346.3	1346.7	1.0	5.8	2.9		
	113	POTS	4	S/F	1346.3	1346.8	.7	700	100		III
	3000	POTS	1	S	1346.4	1346.8	1.1	7.9			
	1470	POTS	1	S	1346.4	1347.2	1.1	5.1			
	234	POTS	4	S/F	1346.4	1346.9	.5	350	5		III
	127	TORN	4	S/F	1346.5	1346.7	1.0	460	230		
	2800	OTTA	21	GRF	1605.0	1635	80.0	3.8	3.0		
	2800	OTTA	1	S	1609.9	1610	1.0	3.8	2.8		
	2800	OTTA	21	GRF	1745.0	1840	195.0	14.6	7.3		
	2800	OTTA	1	S	1801.0	1801.3	1.0	2.6	1.3		
	9400	HUAN		S	1802.7	1803.8	2.7	9.5	5.0		0
	2800	OTTA	3	S	1803.0	1803.9	2.0	11.2	3.7		
	9400	HUAN		S	1834.6	1841.5	23.2	48	3.5		L
	2800	OTTA	1	S	1836.7	1837	2.0	6.6	3.3		
	2800	OTTA	20	GRF	2138.0	2139	15.0	3.0	1.5		

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05	3750	TYKW	45 C	2138.0	2138.7	6.0	7	2.5		
	3750	TYKW	20 GRF	2310.0	2335	100.0	7	2.5		
	9400	TYKW	20 GRF	2310.0	2335	80.0	4	2		
	2695	PENT	240 P	2310.0	2330	20.0	5.6	2.8		
	2000	TYKW	20 GRF	2320.0	2335	80.0	2	1		
	1000	TYKW	45 C	2358.5	2358.9	1.5D	8	2 D		
06	200	GORK	43 NS	0424.0		384.0E		5		
	260	ONDR	44 NS	0600.0E		494.0D	24			
	127	TORN	43 NS	1000.0	1022.4	300.0	90			V1
	1000	TYKW	45 C	0449.0	0452.5	7.5	4.5	1		
	2000	TYKW	5 S	0613.5	0614.0	5.0	3	.6		
	3750	TYKW	5 S	0613.5	0614.0	5.0	3	1		
	536	ONDR	41 F	0633.7	0633.7	30.0	52	16		
	1470	POTS	8 S	0709.5	0709.9	1.0	12			
	536	ONDR	4 S/F	0812.5	0812.7	1.0	34	3		
	536	ONDR	2 S/F	0826.0	0826.3	1.0	21	2		
	200	GORK	8 S	0826.4	0826.8	.9	80			
	100	GORK	8 S	0826.5	0826.6	.8	540 D			
	113	POTS	4 S/F	0826.7	0826.8	1.1	840	200		III
	3100	CRIM	3 S	0852.0	0855.0	11.0	18	6		
	5200	BERN	3 S	0853.2	0855.1	48.0	10.0			ONLY PAPER REC
	3200	BERN	3 S	0853.2	0855.1	15.0	.0			ONLY PAPER REC
	2950	GORK	20 GRF	0853.3	0855.0	13.0	19.2			
	3000	POTS	3 S	0853.5	0855.0	1.5U	23			
	536	ONDR	8 S	0931.6	0931.6	.2	49			
	113	POTS	41 F	0941.4	0941.5	.9	700	30		III
	100	GORK		0941.5	0942.1		200			
	100	GORK	46 C	0941.5	0941.6	1.0	530 D			
	113	POTS	4 S/F	1158.9	1200.0	1.9	600	20		III
	2800	OTTA	21 GRF	1220.0	1305	60.0	5.2	2.4		
	3200	BERN	21 GRF	1253.7	1302.5	25.0	.0			ONLY PAPER REC
	5200	BERN	20 GRF	1253.7	1302.5	25.0	7.0			ONLY PAPER REC
	808	ONDR	2 S/F	1300.5	1302.6	4.0	12	3		
	29	UPIC	42 SER	1300.8	1302.5	8.8				
	536	ONDR	45 C	1300.8	1301.8	4.5	46	4		
	228	HARS	7 C	1300.9	1301.7	1.4	195 D	14		
	127	TORN	4 S/F	1301.0	1302.3	2.0	430	44		
	33	UPIC	42 SER	1301.0	1302.2	8.8				
	1470	POTS	4 S/F	1301.0	1302.5	2.0	12			
	113	POTS	4 S/F	1301.0	1302.0	1.6	350	20		III
	260	ONDR	45 C	1301.0	1301.7	4.0	118	17		
	234	POTS	4 S/F	1301.9	1301.9	.8	1100	25		III
	3000	POTS	8 S	1302.0	1302.4	1.0	10			
	2800	OTTA	8 S	1302.0	1302.2	.6	7.4	3.7		
	11000	BERN	1 S	1317.0	1342.2	110.0	16.0			ONLY PAPER REC
	8400	BERN	1 S	1317.0	1342.2	110.0	8.0			ONLY PAPER REC
	2800	OTTA	20 GRF	1910.0	1955	220.0	5.8	2.9		
	9400	HUAN	S	1950.2	2010.0	33.4	5.1	3.6		L
	1000	TYKW	8 S	2317.0	2317.1	.4	3.5	1		
07	200	GORK	44 NS	0403.0E		153.0D		5		
	260	ONDR	44 NS	0638.0E		470.0D	23	2.3		
	3750	TYKW	5 S	0009.0	0011.0	8.0	9	2		
	2000	TYKW	5 S	0010.0	0011	3.0	1.5	.5		
	9400	TYKW	5 S	0010.0	0011	3.0	4	1.5		
	2695	PENT	1 S	0010.0	0011	2.0	3.8	1.8		
	3750	TYKW	20 GRF	0110.0	0200	90.0	4	2		
	2000	TYKW	20 GRF	0115.0	0200	90.0	2	1		
	9400	TYKW	5 S	0318.5	0319.4	3.5	25	8		
	3750	TYKW	5 S	0319.0	0319.6	1.0	7	3		
	1000	TYKW	5 S	0319.4	0319.6	.8	1	.3		
	3750	TYKW	29 PBI	0320.0		17.0	2	1		
	9400	TYKW	29 PBI	0322.0		15.0	4	2		
	1000	TYKW	5 S	0341.0	0342	4.0	1	.3		
	3750	TYKW	5 S	0341.0	0341.7	7.0	15	3		
	9400	TYKW	5 S	0341.4	0341.6	1.5	10	3		
	2000	TYKW	5 S	0341.4	0341.7	4.0	5	1.5		
	3750	TYKW	5 S	0544.0	0545.4	3.0	2.5	.7		
	3100	CRIM	25 R	0600.0	1054.0		8			
	3200	BERN	21 GRF	0710.0	0741.3	120.0	.0			ONLY PAPER REC
	5200	BERN	20 GRF	0714.5	0742.1	85.0	7.0			ONLY PAPER REC
	3750	TYKW	20 GRF	0723.0	0730	40.0	6	3		
	3100	CRIM	20 GRF	0724.0	0742.0	36.0	7	2		
	9400	TYKW	20 GRF	0725.0	0740	45.0	4	2		
	2000	TYKW	45 C	0729.0	0741.6	25.0	27	2		
	1470	POTS	40 F	0737.0	0741.5	7.0	7.1			
	950	GORK	46 C	0739.6	0740.1	3.9	11			
	950	GORK		0739.6	0741.5		15			
	1000	TYKW	45 C	0739.7	0741.4	3.5	27	4		
	650	GORK	2 S/F	0739.8	0740.7	2.2	26			
	930	BORD	46 C	0739.8	0741.4	3.2	35	5		
	536	ONDR	8 S	0759.7	0759.7	.3	234			
	536	ONDR	45 C	1000.5	1000.8	3.0	150	5		
	9400	HUAN	S	1140.2	1141.5	2.5	4.9	2.9		L

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07	2800	OTTA	21 GRF	1200.0	1225	100.0	3.0	2.0		
	536	ONDR	8 S	1230.8	1230.8	.3	156			
	930	BORD	8 S	1230.8	1230.8	.2	18	2		
	930	BORD	41 F	1258.5	1258.9.	2.4	57	2		
	2800	OTTA	2 S/F	1258.8	1259.7	2.0	2.0			
	1470	POTS	40 F	1259.0	1259	2.0	7.3			
	9400	HUAN	S	1330.1	1350.3	34.7	3.3	2.2		0
	536	ONDR	42 SER	1347.0	1420.2	40.0	20			
	930	BORD	41 F	1428.1	1429.3	1.2	41	2		
	2800	OTTA	260 FAL	1730.0	1840	70.0	-8.4	-4.2		
	2800	OTTA	22 GRF	1915.0	2007	150.0	4.0	2.0		
	1000	TYKW	5 S	2310.9	2311.2	.5	17	3		
08	200	GORK	44 NS	0354.0E		405.0D		10		
	100	GORK	43 NS	0547.0		180.0		5		
	234	POTS	44 NS	0553.0E	0554	242.0D	50			
	260	ONDR	44 NS	0556.0E		491.0D	44	2		
	127	TORN	44 NS	0600.0E		360.0D				V1,DISTURBED
	113	POTS	44 NS	0600.0E	0657	440.0D	15			
	29	UPIC	43 NS	0653.5	1018.3	231.1				
	33	UPIC	43 NS	0653.5	1018.2	231.3				
	950	GORK	20 GRF	0459.6	0506.0	16.5	5.5			
	1000	TYKW	45 C	0501.0	0503.8	5.0	19	2		
	9400	TYKW	45 C	0501.0	0504.0	12.0	138	15		
	2000	TYKW	45 C	0501.0	0504.3	12.0	28	5		
	3750	TYKW	45 C	0501.0	0504.0	12.0	65	8		
	6100	KISV		0501.0	0503.5		51			
	6100	KISV	45 C	0501.0	0504	6.0	80			
	9100	GORK		0501.2	0503.8		140			
	9100	GORK	46 C	0501.2	0502.4	3.2	70			
	9100	GORK		0501.2	0503.3		86			
	2950	GORK	45 C	0501.4	0502.5	5.9	24			
	2950	GORK		0501.4	0503.9		42			
	17000	NOBE	7 C	0502.0	0503.9	4.0	130			R
	650	GORK	1 S	0503.3	0503.7	1.6	7.5			
	9100	GORK	30 PBI	0504.4	0504.5	421.0	40			
	200	GORK	46 C	0504.5	0505.7	3.9D	60			
	200	GORK		0504.5	0507.5		90			
	200	HIRA	42 SER	0504.6	0505.5	3.2	54			0
	100	HIRA	42 SER	0504.8	0507.3	4.0	310			0
	100	GORK		0504.8	0507.4		560			
	100	GORK	41 F	0504.8	0505.1	3.6	550 D			
	3750	TYKW	21 GRF	0522.0	0630	160.0	27	15		
	2000	TYKW	21 GRF	0522.0	0610	160.0	18	11		
	9400	TYKW	21 GRF	0522.0	0630 U	150.0U	34 U	20 U		RAIN
	1000	TYKW	21 GRF	0522.0	0600	140.0	5	2.5		
	650	GORK	22 GRF	0522.0	0525.1	27.9	17			
	950	GORK	21 GRF	0522.4	0559.2	131.0	10.5			
	1000	TYKW		0522.5	0527.0		63			
	8400	BERN	3 S	0522.5U	0524.2U	15.0U	175.0			ONLY PAPER REC
	19600	BERN	3 S	0522.5U	0524.0U	15.0U	140.0			ONLY PAPER REC
	11800	BERN	3 S	0522.5U	0524.2U	15.0U	167.0			ONLY PAPER REC
	1000	TYKW	45 C	0522.5	0523.7	15.0	70	8		
	9100	GORK	4 S/F	0522.8	0523.1	7.6	240			
	2950	GORK	4 S/F	0522.8	0523.2	5.7	104			
	2000	TYKW	45 C	0523.0	0525.1	17.0	135	17		
	9400	TYKW	47 GB	0523.0	0524.4	17.0	520	55		
	3750	TYKW	45 C	0523.0	0524.5	17.0	145	22		
	6100	KISV	47 GB	0523.0	0524.5	3.0	330			
	3100	CRIM	3 S	0523.0	0525.0		116			
	17000	NOBE	3 S	0523.5	0524.3	2.2	281			L
	35000	NAGO	21 GRF	0524.0	0533	36.0	56			
	35000	NAGO	5 S	0524.0	0524	1.0	41			
	950	GORK	46 C	0524.0	0525.2	5.7	22			
	950	GORK		0524.0	0526.9		34			
	17000	NOBE	29 PBI	0525.7	0525.7	10.0	54			0
	6100	KISV	29 PBI	0526.0	0526	210.0	70			
	200	GORK	8 S	0526.5	0527.5	1.1	10000			
	100	HIRA		0526.6	0528.6		70			WL
	100	HIRA	7 C	0526.6	0527.3	2.3	1800	195		WL
	200	HIRA	46 C	0526.6	0527.3	2.5	8000	1100		0
	100	GORK	46 C	0526.7	0527.0	1.0	520			
	100	GORK		0526.7	0527.4		42700			
	2950	GORK	29 PBI	0528.5	0528.6	420.0E	20			
	9100	GORK	1 S	0533.0	0537.2	5.8	170			
	2000	TYKW	45 C	0540.0	0541.6	3.0	3	1		
	1000	TYKW	45 C	0540.5	0541.5	7.0	4	2		
	200	GORK		0551.0	0554.7		80 D			
	200	GORK	46 C	0551.0	0552.0	4.0	80 D			
	930	BORD	46 C	0645.0	0646.4	1.6	28	3		
	100	GORK		0652.6	0657.3		340			
	100	GORK	41 F	0652.6	0653.5	5.8	750			
	100	GORK		0652.6	0655.1		750			
	1000	TYKW	5 S	0653.0	0653.5	1.0	4	1.5		
	2000	TYKW	5 S	0653.0	0653.4	1.0	3	1		

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08	100	GORK	4 S/F	0716.0	0716.8	1.7	570			
	536	ONDR	41 F	1002.0	1023.8	24.0	13	2.3		
	33	UPIC	48 C	1012.6	1018.2	13.3				
	113	POTS	45 C	1013.0	1019.9	14.0	280	20		III
	100	GORK	4 S/F	1013.0	1022.6	12.5	950			
	29	UPIC	48 C	1013.4	1018.3	12.5				
	200	GORK		1013.8	1022.1		200			
	200	GORK	46 C	1013.8	1014.1	11.3	80			
	204	IIMI	41 F	1014.0	1022.0	11.0	165			
	650	GORK	22 GRF	1014.6	1021.0	12.4	8	4		
	950	GORK	20 GRF	1015.0	1016.2	7.6	5			
	930	BORD	46 C	1015.8	1015.9	.6	22	2		
	3000	POTS	20 GRF	1017.0	1021.6	17.0	4.3			
	1470	POTS	22 GRF	1017.0	1021.9	13.0	5.3			
	9100	GORK	1 S	1043.3	1043.8	.9	5	2		
	9100	GORK	1 S	1100.6	1101.0	1.8	6.5	2		
	930	BORD	8 S	1129.0	1129	.1	19	1		
	6100	KISV	8 S	1143.0	1144	2.0	6			
	1470	POTS	8 S	1307.9	1308.3	.6	15			
	536	ONDR	2 S/F	1308.0	1308.5	1.0	10	1		
	2800	OTTA	21 GRF	1355.0	1425	75.0	3.8	1.9		
	930	BORD	8 S	1416.8	1416.8	.2	16	1		
	3200	BERN	4 S/F	1442.0	1444.0	3.0	.0			ONLY PAPER REC
	9500	POTS	4 S/F	1442.5	1444.0	2.5	17			
	5200	BERN	4 S/F	1442.6	1444.0	3.0	17.0			
	3000	POTS	4 S/F	1442.7	1444.4	2.3	10			
	930	BORD	46 C	1442.8	1442.9	.4	100	2		
	9400	HUAN	S	1442.8	1443.9	4.9	21.4	8.9		R
	2800	OTTA	2 S/F	1443.0	1444	4.0	8.6	2.8		
	10715	DWIN	2 S/F	1443.0	1444	2.0	10	8		
	11800	BERN	4 S/F	1443.0	1444.0	2.0	16.0			
	8400	BERN	4 S/F	1443.0	1444.0	2.0	23.0			
	930	BORD	46 C	1534.6	1534.6	.5	55	2		
	2800	OTTA	4 S/F	1911.0	1912.6	6.0	115.0	32.0		
	9400	HUAN	S	1911.2	1912.7	3.5	59.0	24.5		R
	2800	OTTA	29 PBI	1917.0	1917	22.0	8.6	3.0		
	2000	TYKW	8 S	2121.2	2121.3	.2	50	10		
	2800	OTTA	8 S	2121.9	2121.9	.2	4.0			
	2000	TYKW	45 C	2204.0	2205.3	3.0	10	1.5		
	3750	TYKW	45 C	2204.0	2205.3	3.0	12	3		
	2800	OTTA	3 S	2204.5	2205.1	1.0	12.8	4.4		
	2800	OTTA	8 S	2206.0	2206	.1	30.0			
	1000	TYKW	45 C	2334.0	2334.4	4.0	8	.5		
09	260	ONDR	44 NS	0649.0E		441.0D	40			
	1000	TYKW	45 C	0038.0	0040.4	3.0	4.5	.5		
	2800	TYKW	5 S	0040.1	0040.2	.5	4	1		
	2800	TYKW	5 S	0145.0	0147.3	10.0	3	1		
	3750	TYKW	5 S	0145.0	0147.3	15.0	5	1.5		
	9400	TYKW	5 S	0145.0U	0150 U	15.0U	3 U	1.5U		RAIN
	9400	TYKW	20 GRF	0320.0	0500	270.0	8	4		
	1000	TYKW	20 GRF	0320.0	0500	250.0	2	1		
	3750	TYKW	20 GRF	0320.0	0500	270.0	6	3		
	2000	TYKW	20 GRF	0320.0	0430	270.0	4	2		
	930	BORD	46 C	0600.0	0601.4	2.0	36	2		
	930	BORD	41 F	0608.2	0608.2	.3	13	2		
	930	BORD	41 F	0617.4	0617.4	.3	19	2		
	930	BORD	8 S	0952.4	0952.4	.2	24	2		
	228	HARS	45 C	0958.0	0958.5	2.0	175	25		
	260	ONDR	4 S/F	0958.0	0958.3	2.0	128	8		
	1470	POTS	4 S/F	0958.0	0958.5	2.0	9.1			
	930	BORD	46 C	0958.4	0959.6	1.3	14	3		
	2950	GORK	1 S	0958.4	0958.6	.7	5.4	2.7		
	3000	POTS	1 S	0958.5	0958.9	.8	5.6			
	234	POTS	4 S/F	0958.5	0958.8	1.0	1000	50		
	536	ONDR	41 F	1002.0	1008.2	4.5	8	1		
	930	BORD	46 C	1016.6	1016.8	.5	13	2		
	930	BORD	8 S	1117.5	1117.6	.3	36	2		
	3000	POTS	42 SER	1142.0	1149.7	14.0	14			
	2800	OTTA	1 S	1142.0	1142.8	1.0	8.4	2.0		
	2950	GORK	1 S	1142.4	1142.6	.5	9.9	4.9		
	2650	DWIN	2 S/F	1148.0	1149	2.0	20	10		
	3100	CRIM	1 S	1148.0	1149.0	1.0	13	4		
	2800	OTTA	4 S/F	1149.0	1149.7	1.0	15.2	7.6		
	2950	GORK	1 S	1149.0	1149.4	1.3	14.2	7.0		
	1470	POTS	42 SER	1149.0	1155	7.0	3.4			
	930	BORD	46 C	1154.7	1155	.7	68	3		
	536	ONDR	8 S	1155.2	1155.2	.2	39			
	2800	OTTA	20 GRF	1300.0	1420	135.0	2.4	1.6		
	930	BORD	46 C	1412.2	1412.4	.4	24	2		
	9400	HUAN	S	1522.3	1533.3	23.1	3.7	2.2		0
	2800	OTTA	20 GRF	1526.0	1530	45.0	3.4	2.4		
	2800	OTTA	8 S	1601.5	1601.6	.5	4.2			
	2800	OTTA	21 GRF	1745.0	1945	420.0	12.2	6.1		
	2800	OTTA	8 S	1851.3	1851.4	.2	7.2			

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
09	2800	OTTA	2	S/F	1941.0	1943	2.5	4.2	2.4		
	2695	PENT	8	S	2256.5	2256.7	.7	4.6	1.5		
10	200	HIRA	43	NS	2153.0	0208	490.0	10	5		0
	3750	TYKW	5	S	0352.0	0352.3	1.5	3	1		
	260	ONDR	42	SER	1110.0	1351	160.0	21			
	808	ONDR	8	S	1144.3	1144.3	.2	32			
	536	ONDR	8	S	1247.5	1247.5	.2	43			
	536	ONDR	8	S	1350.6	1350.6	.2	25			
	9400	HUAN		S	2152.0	2153.7	2.8	24.3	9.4		R
	9400	TYKW	20	GRF	2157.0U	2202 U	80.0U	12 U	4 U		RAIN
	3750	TYKW	45	C	2157.0	2201.2U	13.0	25 U	7 U		
	2000	TYKW	45	C	2158.0U	2201.8U	12.0U	14 U	3 U		
	2800	OTTA	20	GRF	2158.0	2201	75.0	12.2	4.1		
	1000	TYKW	45	C	2200.5	2201.8	2.5	39	7		
	3750	TYKW	29	PBI	2210.0		70.0	10	4		
	2000	TYKW	29	PBI	2210.0		60.0	4	2		
	1000	TYKW	20	GRF	2220.0	2230	70.0	2	1		
11	200	GORK	44	NS	0358.0E		160.0D		5		
	260	ONDR	44	NS	0630.0E		456.0D	23			
	200	HIRA	43	NS	2246.7	0214	290.0	15	5		0
	3750	TYKW	21	GRF	0142.0	0152	95.0	8	3		
	9400	TYKW	20	GRF	0143.0	0152	90.0	6	3		
	2000	TYKW	21	GRF	0145.0	0151	100.0	4	2		
	3750	TYKW	5	S	0402.0	0403	8.0	2	.5		
	3100	CRIM	25	R	0600.0	0800.0		8			
	3100	CRIM	1	S	0614.0	0618.0	6.5	5	2		
	2000	TYKW	21	GRF	0615.0	0700	70.0	3	1		
	3750	TYKW	21	GRF	0615.0	0700	70.0	5	2.5		
	9400	TYKW	21	GRF	0615.0	0700	70.0	5	2		
	2000	TYKW	5	S	0615.0	0619	15.0	3	1		
	3750	TYKW	5	S	0617.0	0619.0	5.0	3.5	1.5		
	100	GORK	8	S	0617.2	0617.3	.3	100 D			
	200	GORK	8	S	0617.2	0617.3	.3	1080 D			
	2950	GORK	1	S	0617.2	0617.2	2.3	9.9	4.9		
	6100	KISV	32	ABS	0626.0	0628	9.0	-3			
	6100	KISV	8	S	0635.0	0635.5	2.0	7			
	3750	TYKW	5	S	0635.0	0635.6	2.0	6	1.5		
	9400	TYKW	5	S	0635.0	0635.6	1.2	6	3		
	1000	TYKW	8	S	0748.8	0748.9	.2	55	15		
	3100	CRIM	20	GRF	0821.0	0830.0	29.0	4	1		
	2800	OTTA	24	R	1225.0	1305	40.0	3.8	1.9		
	2800	OTTA	27	RF	1225.0		240.0	3.8	3.2		
	2800	OTTA	24P	R	1305.0		165.0	3.8			
	2800	OTTA	26	FAL	1550.0	1625	35.0	-3.8	-1.9		
	2800	OTTA	20	GRF	1715.0	1720	50.0	2.0	1.6		
	9400	HUAN		S	1717.0	1749.5	70.4	5.6	3.7		0
	9400	TYKW	5	S	2213.0	2219	25.0	5	2		
	3750	TYKW	5	S	2213.0	2215.7	5.0	10	3		
	2000	TYKW	5	S	2214.0	2216.0	3.0	9	2		
	2800	OTTA	1	S	2215.0	2216	2.5	7.2	2.4		
	2000	TYKW	29	PBI	2217.0		10.0	2	1		
	3750	TYKW	29	PBI	2218.0		20.0	4	2		
12	200	GORK	44	NS	0355.0E		512.0D		5		
	260	ONDR	44	NS	0600.0E		465.0D	51			
	200	HIRA	43	NS	0720.0	0731	90.0D	20	5		0
	127	TORN	43	NS	1006.0	1143.8	290.0	58			V1
	3750	TYKW	21	GRF	0045.0	0130	160.0	5	2.5		
	2000	TYKW	21	GRF	0045.0	0130	210.0	4	1.5		
	1000	TYKW	45	C	0046.0	0048.7	4.0	9	1.5		
	2000	TYKW	45	C	0046.0	0049.3	3.5	5	2		
	3750	TYKW	5	S	0050.0	0052	4.0	4	2		
	9400	TYKW	21	GRF	0050.0	0100	150.0	8	3		
	2000	TYKW	5	S	0154.3	0154.9	2.0	3	1		
	2000	TYKW			0200.0	0221		7			
	3750	TYKW	5	S	0200.0	0203	15.0	4	2		
	2000	TYKW	45	C	0200.0	0202.1	90.0	19	2.5		
	9400	TYKW	5	S	0201.0	0202.3	4.0	7	2		
	3750	TYKW	45	C	0218.0	0228	35.0	4	2		
	1000	TYKW	45	C	0307.5	0309.8	7.0	6	1		
	3750	TYKW	5	S	0310.0	0311	3.0	3	1		
	3750	TYKW	5	S	0505.0	0508	15.0	2	1		
	2000	TYKW	5	S	0506.0	0508	5.0	3	1		
	9400	TYKW	5	S	0507.0	0508	8.0	4	2		
	6100	KISV	46	C	0544.0	0547	4.0	18			
	3100	CRIM	3	S	0545.0	0547.5	3.5	17	5		
	3750	TYKW	45	C	0545.0	0547.0	3.0	27	6		
	9100	GORK	21	GRF	0545.5	0550.3	16.3	9			
	950	GORK	2	S/F	0545.9	0546.5	.9	20			
	2950	GORK	3	S	0546.0	0546.8	2.0	17.1	8		
	2000	TYKW	45	C	0546.0	0546.9	2.0	22	7		
	1000	TYKW	45	C	0546.0	0547.2	2.0	125	5		
	9100	GORK	1	S	0546.3	0546.5	1.6	21	8		

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	POLARIZATION OR REMARKS
12	9400	TYKW	45	C	0546.5	0546.7	1.5	24	10		
	3750	TYKW	29	PBI	0548.0		22.0	3.5	1.5		
	2000	TYKW	29	PBI	0548.0		40.0	2	1		
	9400	TYKW	29	PBI	0548.0		22.0	7	3		
	1000	TYKW	29	PBI	0548.0		30.0	1.5	.5		
	6100	KISV	29	PBI	0548.0	0548	32.0	5			
	930	BORD	41	F	0737.3	0737.6	.7	30	2		
	200	GORK	4	S/F	0857.5	0900.2	3.5	80 D			
	3100	CRIM	20	GRF	0907.0	0942.0	144.0	7	2		
	100	GORK			1037.6	1039.0		135			
	100	GORK	41	F	1037.6	1038.8	2.9	110			
	29	UPIC	46	C	1142.8	1143.8	6.5				
	33	UPIC	46	C	1142.9	1143.2	2.3				
	100	GORK	4	S/F	1144.1	1144.3	3.2	150 D			
	2800	OTTA	23	GRF	1210.0	1249	95.0	7.4	3.6		
	2800	OTTA	1	S	1246.0	1246.1	2.0	3.0	1.5		
	2800	OTTA	20	GRF	1455.0	1503	60.0	3.8	1.9		
	9400	HUAN		S	2004.7	2013.8	19.5	11.8	5.0		L
13	200	GORK	44	NS	0357.0E		71.0D		5		
	2000	TYKW	5	S	0201.0	0204	10.0	2	1		
	1000	TYKW	45	C	0329.0	0329.8	3.0	7	2		
	3750	TYKW	20	GRF	0519.0	0520	30.0	2	1		
	3100	CRIM	20	GRF	0748.0	0851.0	117.0	4	1		
	3100	CRIM	24	R	1058.0	1124.0		3			
	2800	OTTA	1	S	1308.2	1308.8	1.2	3.8	1.9		
	33	UPIC	45	C	1351.9	1352.6	3.8				
	29	UPIC	45	C	1352.2	1353.2	3.1				
	2800	OTTA	20	GRF	1356.0		150.0	3.8			
	2800	OTTA	20	GRF	1725.0	1728	20.0	2.8	1.4		
	2800	OTTA	3	S	1853.0	1853.9	2.0	10.8	5.4		
	3750	TYKW	5	S	2137.5	2138.3	2.5	3.5	1.5		
	2800	OTTA	1A	S	2137.7	2138.1	3.0	3.6	1.8		
	2800	OTTA	8	S	2139.1	2139.4	.3	22.0			
14	260	ONDR	44	NS	0706.0E		430.0D	78			
	1000	TYKW	45	C	0550.5	0552.0	3.0	30	6		
	127	TORN	8	S	0953.5	0954	.9	1600	800		
	234	POTS	4	S/F	0953.6	0953.7	.3	265	50		III
	234	POTS	41	F	1115.9	1116.5	.8	200	5		
	260	ONDR	46	C	1124.5	1126.4	3.0	168	13		
	536	ONDR	45	C	1125.2	1125.2	2.0	39	2		
	930	BORD	41	F	1125.2	1126.4	1.4	152	2		
	1470	POTS	8	S	1126.2	1126.4	.8	24			
	930	BORD	8	S	1130.5	1130.5	.1	30	1		
	9400	HUAN		S	1131.5	1141.3	23.7	11.5	6.1		0
	228	HARS	45	C	1137.5	1139.5	5.5	115	15		
	2800	OTTA	21	GRF	1210.0		275.0	3.8	2.2		
	808	ONDR	8	S	1226.6	1226.6	.2	48			
	234	POTS	42	SER	1353.7	1357.4	3.7	240	1		
	2800	OTTA	1	S	1435.5	1436	1.0	1.6	.8		
	2800	OTTA	1	S	2039.5	2040.2	3.0	7.8	3.0		
15	9400	TYKW	5	S	0324.0	0324.7	2.0	8	2.5		
	2000	TYKW	45	C	0422.0	0423.2	3.0	5	1.5		
	1000	TYKW	5	S	0422.0	0423.8	3.0	3.5	.7		
	3750	TYKW	5	S	0422.5	0423.2	3.5	3	1		
	1000	TYKW	45	C	0504.3	0504.7	.7	11	2.5		
	3200	BERN	4	S/F	0728.6	0729.8	7.0	.8			ONLY PAPER REC
	5200	BERN	4	S/F	0728.7	0729.8	6.0	14.0			
	11800	BERN	4	S/F	0728.7	0732.5	12.0	11.0			
	500	HIRA	46	C	0728.9	0730.0	1.6	80	30		ML
	930	BORD	46	C	0729.0	0730.1	3.0	24	5		
	536	ONDR	4	S/F	0729.0	0730	2.5	63	6		
	1470	POTS	3	S	0729.0	0730.2	3.0	10			
	2650	DWIN	2	S/F	0729.0	0730	2.0	35	20		
	3000	POTS	4	S/F	0729.0	0730.0	3.5	25 U			
	3750	TYKW	45	C	0729.0	0729.9	3.0	17	6		
	2000	TYKW	45	C	0729.0	0730.2	3.0	16	6		
	1000	TYKW	45	C	0729.0	0730.3	3.0	12	3		
	2950	GORK	4	S/F	0729.1	0729.6	3.9	25			
	650	GORK	4	S/F	0729.2	0729.8	1.9	27	7		
	950	GORK	3	S	0729.2	0730.2	4.2	9			
	9100	GORK	20	GRF	0729.3	0731.5	8.1	6.5			
	9500	POTS	29	PBI	0729.5	0730.3	11.0	5.5			
	260	ONDR	45	C	0739.0	0739.6	2.0	46	8		
	9500	POTS	8	S	0802.9	0803.1	.8	32			
	10715	DWIN	3	S	0803.0	0803.5	1.0	40	10		
	9400	TYKW	5	S	0803.0	0803.2	.6	44	14		
	3100	CRIM	3	S	0828.5	0829.5	2.5	24	8		
	3000	POTS	20	GRF	0845.0	0857	25.0U	4.6			
	1470	POTS	20	GRF	0845.0	0855	25.0	1.4			
	9500	POTS	20	GRF	0845.0	0856	45.0	4.1			
	3100	CRIM	29	PBI	0845.0	0846.0	37.0	6	2		
	9100	GORK	20	GRF	0845.4	0851.4	21.8	5			

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DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
15	260	ONDR	45 C	1139.0	1140.7	3.0	44	7.8		
	228	HARS	45 C	1139.5	1141.0	2.5	95	10		
	204	IZMI	41 F	1140.1	1141.5	2.0	175			
	1470	POTS	2 S/F	1140.5	1141.0	1.5	2.8			
	29	UPIC	45 C	1140.9	1141.2	.9				
	33	UPIC	45 C	1141.0	1141.6	.9				
	2800	OTTA	1 S	1807.9	1808.2	1.0	3.6	1.8		
16	260	ONDR	42 SER	0700.7	0837.7	164.0	37			
	536	ONDR	42 SER	0702.5	0703.9	17.0	18			
	930	BORD	41 F	0702.6	0702.6	1.5	26	2		
	1000	TYKW	45 C	0703.5	0703.8	.5	18	4		
	536	ONDR	42 SER	0834.3	0837.3	4.0	21			
	2950	GORK		0834.9	0837.1		3.1	1.5		
	2950	GORK	41 F	0834.9	0835.2	2.5	2.1	1		
	5200	BERN	2 S/F	0837.0U	0837.3U	7.0U	11.0			ONLY PAPER REC
	3200	BERN	2 S/F	0837.0U	0837.3U	7.0U	.0			ONLY PAPER REC
	260	ONDR	42 SER	1248.0	1249.2	40.0	67			
	234	POTS	42 SER	1248.4	1250.1	2.5	170	3		III
	536	ONDR	8 S	1309.0	1309.8	.2	22			
	2800	OTTA	240 R	1615.0	1655	40.0	5.8	3.2		
	2800	OTTA	20 GRF	1755.0	1805	35.0	2.0	1.0		
	2800	OTTA	21 GRF	2045.0	2057	65.0	3.4	1.7		
	2800	OTTA	2 S/F	2047.0	2048.3	4.0	7.6	3.4		
	2800	OTTA	8 S	2122.7	2122.9	.3	2.2			
	2695	PENT	20 GRF	2310.0	2325	35.0	2.2	1.1		
17	9400	TYKW	20 GRF	0650.0	0710	60.0	4	2		
	3750	TYKW	20 GRF	0650.0	0710	70.0	6	3		
	2800	TYKW	20 GRF	0650.0	0710	70.0	4	2		
	2800	OTTA	20 GRF	1325.0	1355	60.0	2.8			
	2800	OTTA	21 GRF	1755.0	1850	240.0	9.4	4.7		
	2800	OTTA	1 S	1759.0	1801	4.0	1.4	.7		
	9400	HUAN	S	1817.3	1830.0	65.7	5.0	3.5		0
18	200	HIRA	43 NS	0000.0	0146	240.0	10	5		WL
	127	TORN	44 NS	0710.0E	0826.2	140.0D	25			V0
	260	ONDR	42 SER	0711.0	0847.5	124.0	22			
	2800	OTTA	21 GRF	1750.0	1900	190.0	5.0	3.6		
	2800	OTTA	1 S	1803.0	1803.9	2.0	2.8	1.2		
	2695	PENT	1 S	2008.0	2009.3	5.0	1.8	.8		
	2695	PENT	240 R	2130.0	2250	8.0	3.4	1.5		
19	3750	TYKW	20 GRF	0030.0	0051.5	70.0	4	1.5		
	2000	TYKW	20 GRF	0030.0	0100	70.0	2	1		
	1000	TYKW	42 SER	0055.0	0059.2	10.0	6	.5		
	1000	TYKW	45 C	0727.0	0727.1	2.0	5	1		
	2000	TYKW	5 S	0727.0	0727.8	2.0	4	1.5		
	930	BORD	41 F	0727.3	0727.3	.2	41	2		
	1470	POTS	1 S	0727.5	0727.8	1.5	3.6			
	3000	POTS	1 S	0727.5	0727.9	1.0	3.0			
	9500	POTS	1 S	0727.5	0727.8	2.5	2.7			
	6100	KISV	4 S/F	0727.5	0728	2.0	5			
	3100	CRIM	21 GRF	1029.0	1102.0	91.0	7	2		
	2950	GORK	20 GRF	1047.0	1100.7	70.0	10.2	5.0		
	808	ONDR	4 S/F	1058.6	1100.2	2.5	98	35		
	536	ONDR	45 C	1058.7	1100	2.5	34	18		
	3000	POTS	4 S/F	1059.0	1101	4.0	9.1			
	930	BORD	46 C	1059.0	1100	2.4	144	14		
	9500	POTS	20 GRF	1059.0	1102.5	46.0	11			
	3100	CRIM	1 S	1059.0	1101.0	4.0	8	3		
	1470	POTS	4 S/F	1059.0	1101.1	4.0	16			
	2650	DWIN	1 S	1059.0	1101	3.0	10	8		
	33	UPIC	42 SER	1105.9	1106.1U	46.7				
	29	UPIC	42 SER	1106.1	1112.6	45.8				
	2800	OTTA	20 GRF	1345.0	1420	60.0	2.8	1.4		
	33	UPIC	45 C	1409.8	1410	2.2				
	113	POTS	4 S/F	1410.1	1410.4	.6	200	35		III
	29	UPIC	45 C	1410.2	1410.8	2.1				
	2800	OTTA	22 GRF	1500.0	1600	240.0	6.4	3.0		
	2800	OTTA	20 GRF	1915.0	1945	100.0	3.2			
20	2000	TYKW	5 S	0256.0	0257	3.0	1	.5		
	9400	TYKW	5 S	0256.0	0257	4.0	6	2		
	3750	TYKW	5 S	0256.0	0257 U	4.0	3 D	1 D		
	2000	TYKW	21 GRF	0350.0	0640	220.0	3	1.5		
	9400	TYKW	20 GRF	0350.0	0415	50.0U	6 U	3 U		RAIN
	3750	TYKW	21 GRF	0350.0	0415	70.0	3	1.5		
	3750	TYKW	5 S	0357.0	0357.6	2.0	2	.7		
	2000	TYKW	5 S	0411.5	0412.3	1.5	3	.8		
	3750	TYKW	20 GRF	0510.0	0640	140.0	6	3		
	9100	GORK	4 S/F	0522.8	0523.5	1.0	35			
	2000	TYKW	5 S	0628.0	0628.8	2.0	2	.5		
	9100	GORK	20 GRF	0630.8	0639.2	25.5	5.5			
	2950	GORK	20 GRF	1014.0	1015.6	30.0E	5.4			

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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
20	3100	CRIM	1	S	1014.0	1016.0	4.0	5	2		
	9100	GORK	20	GRF	1014.1	1015.8	29.0E	10			
	6100	KISV	3	S	1014.5	1016.2	2.5	7			
	9500	POTS	1	S	1015.0	1016	2.0	2.7			
	3000	POTS	1	S	1015.5	1016.2	1.2	3.7			
	2800	OTTA	22	GRF	1900.0	2025	110.0	7.8	5.7		
21	260	ONDR	43	NS	0747.0		380.0D	28			
	200	HIRA	44	NS	2024.0E	0120	480.0D	10	5		0
	100	HIRA	46	C	0111.0	0111.5	2.0	2600	440		ML
	2000	TYKW	5	S	0111.0	0111.8	2.0	4	1		
	1000	TYKW	5	S	0111.0	0111.8	2.0	1	.3		
	3750	TYKW	5	S	0111.3	0111.7	1.5	7	2.5		
	2800	OTTA	20	GRF	1815.0		130.0	3.4			
	3750	TYKW	5	S	2259.0	2259.5	2.0	3.5	1		
22	260	ONDR	44	NS	0600.0E		492.0D	14			
	1000	TYKW	5	S	0159.2	0159.4	.5	2.5	.8		
	2000	TYKW	5	S	0539.0	0540.4	3.0	4	1.5		
	3750	TYKW	45	C	0539.0	0540.4	3.0	7	2.5		
	1000	TYKW	5	S	0539.7	0540.6	2.0	6	2.5		
	3750	TYKW	20	GRF	0545.0	0557	40.0	3	1.5		
	9400	TYKW	20	GRF	0550.0	0557	30.0	3	1.5		
	3100	CRIM	24	R	0652.0	0739.5		8			
	9100	GORK	20	GRF	0733.0	0809.6	98.0	10	3.5		
	6100	KISV	1	S	0850.0	0850.5	1.0	9			
	3100	CRIM	1	S	0855.5	0856.5	2.0	9 D	3		
	5200	BERN	1	S	0855.5U	0856.0U	1.0U	13.0			ONLY PAPER REC
	3200	BERN	1	S	0855.5U	0856.0U	1.0U	.0			ONLY PAPER REC
	2950	GORK	1	S	0855.8	0855.9	1.2	12	6.0		
	9500	POTS	1	S	0856.0	0856.6	1.5	4.0			
	3000	POTS	3	S	0856.3	0856.5	1.7	16			
	1470	POTS	1	S	0856.5	0856.7	2.0	3.4			
	9100	GORK	20	GRF	1012.8	1037.3	140.0E	11			
	2800	OTTA	240	R	1435.0	1450	15.0	3.4	1.7		
	2800	OTTA	20	GRF	1615.0	1620	35.0	3.4	1.7		
	2800	OTTA	20	GRF	1715.0	1755	115.0	5.2	2.6		
	2695	PENT	240	R	2045.0	2130	45.0	3.6	1.8		
23	200	HIRA	44	NS	0154.0E	0716	330.0D	10	3		WR
	260	ONDR	44	NS	0550.0E		497.0D	12			
	204	IZMI	44	NS	0600.0E		90.0D	50			
	127	TORN	44	NS	0700.0E	1020.5	320.0D	190	1		V0
	2000	TYKW	21	GRF	0210.0	0430	250.0	3	1		
	3750	TYKW	21	GRF	0210.0	0420	250.0	5	2		
	9400	TYKW	20	GRF	0220.0	0230	70.0	8	4		
	3750	TYKW	45	C	0221.0	0222.4	55.0	14	3		
	9400	TYKW	28	PRE	0426.0	0429	13.0	4	3.5		
	3750	TYKW	28	PRE	0426.0	0429	13.0	5	2		
	6100	KISV	46	C	0438.0	0441	12.0	20			
	3750	TYKW	45	C	0439.0	0441.1	20.0	18	7		
	2000	TYKW	5	S	0439.0	0440.7	5.0	3.5	2		
	9400	TYKW	45	C	0439.0	0439.7	10.0	36	15		
	17000	NOBE	20	GRF	0439.2	0444.0	16.0	12			0
	9100	GORK	4	S/F	0439.2	0439.8	2.5	37			
	9100	GORK	30	PBI	0441.7	0448.7	86.0	16			
	2000	TYKW	29	PBI	0444.0		75.0	2	1		
	9400	TYKW	30	PBI	0449.0		85.0	12	4		
	6100	KISV	29	PBI	0450.0	0450	10.0	10			
	3750	TYKW	30	PBI	0459.0		70.0	4	2		
	9400	TYKW	5	S	0549.0	0550.2	12.0	6	1.5		
	3750	TYKW	45	C	0549.0	0550.3	10.0	13	3.5		
	6100	KISV	4	S/F	0549.0	0550	7.0	14			
	9100	GORK	2	S/F	0549.9	0550.2	1.2	7			
	2950	GORK	1	S	0550.1	0550.2	1.5	5.0	2.5		
	3200	BERN	41	F	0653.3U	0655.5U	3.5U	.0			ONLY PAPER REC
	5200	BERN	41	F	0653.3U	0655.5U	3.5U	20.0			ONLY PAPER REC
	260	ONDR	46	C	0653.5	0655.2	4.0	104	15		
	2650	DWIN	2	S/F	0654.0	0656	3.0	30	15		
	536	ONDR	46	C	0654.0	0656.2	4.0	143	10		
	930	BORD	46	C	0654.0	0656	4.0	207	25		
	500	HIRA	46	C	0654.0	0654.3	2.0	1000	90		MR,ML
	6100	KISV	8	S	0654.0	0654.7	1.5	10			
	1000	TYKW	45	C	0654.0	0656.0	5.0	180	20		
	3750	TYKW	45	C	0654.0	0656.0	4.0	29	5		
	2000	TYKW	45	C	0654.0	0656.0	5.0	29	6		
	650	GORK			0654.2	0655.9U		0 7.4			
	2950	GORK	45	C	0654.2	0654.8	4.9	17			
	2950	GORK			0654.2	0656.1		30			
	950	GORK	46	C	0654.2	0655.0	4.0	36			
	950	GORK			0654.2	0656.0		87			
	9400	TYKW	45	C	0654.3	0656.0	2.0	9	2.5		
	228	HARS	45	C	0654.4	0654.5	2.1	240 D	40		
	9100	GORK	2	S/F	0654.5	0654.8	3.0	10			
	200	HIRA	46	C	0654.5	0654.7	2.0	1000	170		WL

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
23	650	GORK	46	C	0654.5	0654.9	2.6	0 3.0			
	204	IZMI	41	F	0654.5	0654.5	2.0	1000			
	100	HIRA	46	C	0654.6	0656.2	2.0	360	140		WL
	3000	POTS	4	S/F	0655.0	0656.4	2.0	31 U			
	1470	POTS	4	S/F	0655.0	0657	3.0	83			
	9500	POTS	2	S/F	0655.0	0656.5	3.0	5.5			
	234	POTS	4	S/F	0655.2	0655.3	1.7	480	20		III
	113	POTS	4	S/F	0655.2	0656.8	2.0	840	40		III
	6100	KISV	8	S	0655.5	0656	1.5	12			
	6100	KISV	3	S	0752.0	0752.5	1.0	4			
	9100	GORK	20	GRF	0834.6	0958.2	216.0E	19			
	536	ONDR	42	SER	0916.0	0932.2	10.0	104			
	930	BORD	3	S	1115.5	1115.7	.0	15	4		
	29	UPIC	3	S	1115.9	1116.1	.5				
	33	UPIC	3	S	1116.3	1116.5	.6				
	536	ONDR	42	SER	1310.0	1310	2.0	46			
	2800	OTTA	1	S	1351.0	1358	7.0D	2.2			
	260	ONDR	4	S/F	1359.3	1359.3	1.0	148	17		
	29	UPIC	3	S	1402.0	1402.1	.5				
	33	UPIC	3	S	1402.0	1402.1	.9				
	2800	OTTA	21	GRF	1540.0	1625	370.0	11.4	5.7		
	3200	BERN	4	S/F	1550.0	1600.5	20.0	.0			ONLY PAPER REC
	5200	BERN	4	S/F	1552.4	1600.5	17.0	102.0			
	8400	BERN	4	S/F	1553.2	1559.8	13.5	34.0D			
	11000	BERN	4	S/F	1553.2	1601.7	10.0	26.0D			
	2650	DWIN	4	S/F	1554.0	1600	13.0	120	80		
	2800	OTTA	4	S/F	1554.0	1601.7	15.0	133.0	63.0		
	10715	DWIN	3	S	1555.0	1600	10.0	25	20		
24	260	ONDR	43	NS	0740.0		390.0D	22			
	127	TORN	44	NS	0800.0E		480.0D		1		V0
	3750	TYKW	5	S	0143.0	0144.3	5.0	4	1		
	3100	CRIM	25	R	0622.0	0817.0	160.0	5.5	2		
	6100	KISV	46	C	0727.0	0732.8	10.0	158			
	8400	BERN	3	S	0727.0	0732.7	9.0	107.0			
	9100	GORK	21	GRF	0727.4	0734.0	18.5	18			
	3100	CRIM	3	S	0728.0	0733.0	14.0	105	58		
	536	ONDR	41	F	0728.0	0730.8	17.0	91	11		
	19800	BERN	3	S	0729.5	0732.8	4.0	60.0U			
	9400	TYKW	45	C	0730.0	0732.8	6.0	117	20		
	3750	TYKW	45	C	0730.0	0732.7	6.0	124	25		
	260	ONDR	46	C	0730.0	0732.7	10.0	44	5.2		
	650	GORK	46	C	0730.2	0730.4	3.0	70			
	650	GORK			0730.2	0733		73			
	11000	BERN	3	S	0730.3	0732.8	7.0	92.0			
	930	BORD	46	C	0730.4	0732.8	7.6	714	20		
	950	GORK	46	C	0730.4	0730.7	7.6	112			
	9100	GORK	4	S/F	0730.4	0732.7	3.5	130			
	950	GORK			0730.4	0732.8		360			
	2950	GORK	1	S	0730.4	0732.5	8.5	97			
	1000	TYKW	47	GB	0730.5	0732.9	8.0	510	40		
	2000	TYKW	45	C	0730.5	0732.8	8.0	70	12		
	808	ONDR	45	C	0731.0	0732.8	5.0	162	10		
	1470	POTS	4	S/F	0731.0	0734.4	9.0	110			
	3000	POTS	4	S/F	0731.0	0733.4	9.0	120 U			
	9500	POTS	4	S/F	0731.0	0733.5	19.0	296			
	35000	BERN	3	S	0731.7	0733.6	3.0	52.0U			
	650	GORK	30	PBI	0733.2	0733.3	14.8	4			
	200	HIRA	7	C	0734.4	0735.3	1.9	760	170		0
	100	HIRA	7	C	0734.8	0735.3	5.6	9000	360		WL
	650	GORK	4	S/F	0735.5	0736.2	1.8	9.5	4		
	113	POTS	4	S/F	0736.8	0738.6	4.2	630	200		III
	650	GORK	3	S	0742.5	0743.8	2.1	15			
	2800	OTTA	24	R	1440.0	1505	25.0	3.0	1.5		
	2800	OTTA	27A	RF	1440.0		405.0	3.0	2.8		
	2800	OTTA	24P	R	1505.0		345.0	3.0			
	2800	OTTA	1	S	1632.0	1633.8	3.0	4.2	1.6		
	2800	OTTA	26	FAL	2050.0	2125	35.0	-3.0	-1.5		
25	260	ONDR	43	NS	0725.0		410.0D	40			
	3750	TYKW	5	S	0033.0	0033.5	25.0	2.5	1		
	2000	TYKW	5	S	0102.0	0102.6	3.0	2.5	1		
	3750	TYKW	45	C	0102.5	0102.7	1.5	1.5	.5		
	1000	TYKW			0102.5	0103.2		7			
	1000	TYKW	45	C	0102.5	0102.7	2.0	7	2		
	2000	TYKW	20	GRF	0425.0	0445	70.0	4	2		
	9400	TYKW	20	GRF	0425.0	0445	70.0	4	2		
	3750	TYKW	20	GRF	0425.0	0445	70.0	5	2.5		
	3100	CRIM	25	R	0600.0	0724.0		9			
	3100	CRIM	3	S	0914.0	0914.5	1.0	8	2		
	3000	POTS	23	GRF	0914.0	0943	76.0	22 U			
	2650	DWIN	1	S	0915.0	0915.5	1.0	5	3		
	2950	GORK	1	S	0915.0	0915.3	1.1	4.8	2.4		
	6100	KISV	1	S	0915.0	0915.5	1.0	8			
	1470	POTS	20	GRF	0930.0	0943	20.0	2.9			

SOLAR RADIO EMISSION
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DAY OF MONTH	FREQUENCY	STATION	TYPE		STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
					UT	UT	MINUTES	PEAK	MEAN		
25	9500	POTS	20	GRF	0935.0	0955	45.0	5.6			
	650	GORK	1	S	0937.9	0938.7	1.9	3	1.5		
	3100	CRIM	3	S	0940.0	0942.0	3.0	8	2		
	2650	DWIN	1	S	0941.0	0943	3.0	5	3		
	2950	GORK	1	S	0941.8	0942.4	5.0	4.8			
	2695	PENT	20	GRF	2213.0	2215	11.0	2.0	1.6		
26	127	TORN	43	NS	0800.0U		450.0U		1		V1,DISTURBED
	260	ONDR	43	NS	0835.0		335.0D	67			
	200	HIRA	44	NS	2028.0E	0152	270.0D	10	3		0
	33	UPIC	48	C	0801.7	0806.4	27.2				
	29	UPIC	46	C	0806.0	0806.3	8.2				
	2950	GORK	1	S	0839.2	0839.5	1.4	3.0	1.5		
	6100	KISV	4	S/F	0859.0	0859.5	3.0	3			
	536	ONDR	2	S/F	1008.8	1009.1	.8	49	2		
	808	ONDR	2	S/F	1009.2	1009.7	.6	36			
	930	BORD	41	F	1009.2	1009.5	.7	100	2		
	808	ONDR	4	S/F	1037.2	1038	1.5	192	25		
	6100	KISV	45	C	1037.5	1038	4.0	28			
	536	ONDR	4	S/F	1037.5	1038.1	1.0	332	39		
	11800	BERN	3	S	1037.5	1037.9	3.0	32.0			
	5200	BERN	3	S	1037.5	1037.9	7.0	22.0			
	8400	BERN	3	S	1037.5	1037.9	3.0	28.0			
	3200	BERN	3	S	1037.5	1038.0	7.0	.0			ONLY PAPER REC
	19600	BERN	3	S	1037.5	1037.8	2.0	34.0			
	9100	GORK	3	S	1037.6	1037.8	2.7	34			
	950	GORK	3	S	1037.7	1038.0	4.3	140	D		
	930	BORD	41	F	1037.7	1038	.6	380	20		
	2950	GORK	3	S	1037.7	1038.1	4.2	14			
	650	GORK	4	S/F	1037.8	1037.9	1.3	52	15		
	234	POTS	4	S/F	1037.9	1037.9	.2	260	40		
	10715	DWIN	1	S	1038.0	1038.5	1.0	15	10		
	2650	DWIN	1	S	1038.0	1038.5	4.0	25	10		
	234	POTS	4	S/F	1223.5	1223.8	.5	150	5		
	2800	OTTA	27A	RF	1335.0		375.0	2.0	1.9		
	2800	OTTA	24	R	1335.0	1350	15.0	2.0	1.0		
	2800	OTTA	24P	R	1350.0		330.0	2.0			
	2800	OTTA	1	S	1520.0	1521.5	3.0	4.2	2.1		
	2800	OTTA	29	PBI	1523.0	1523	25.0	2.0	1.0		
	2800	OTTA	8	S	1604.5	1604.7	.5	2.6	1.3		
	9400	HUAN		S	1745.1	1748.4	21.0	14.1	4.1		0
	2800	OTTA	4	S/F	1746.5	1748	4.0	15.2	7.6		
	2800	OTTA	29	PBI	1750.5	1750.5	15.0	5.8	1.9		
	2800	OTTA	26	FAL	1920.0	1950	30.0	-2.0	-1.0		
	2800	OTTA	20	GRF	2110.0	2117	25.0	3.8	1.9		
	2800	OTTA	260	FAL	2140.0	2147	7.0	-3.8	-1.9		
	9400	TYKW	45	C	2200.7U	2201.7	6.0U	45	U	6 U	RAIN
	3750	TYKW	45	C	2200.8	2201.7	6.0	19	4		
	1000	TYKW	45	C	2200.8	2201.7	6.0	230	20		
	2000	TYKW	45	C	2200.8	2201.0	6.0	26	4.5		
	2800	OTTA	4	S/F	2201.0	2201.8	2.5	18.2	7.0		
	9400	HUAN		S	2201.1	2201.5	1.7	45.4	14.7		L
	2800	OTTA	1	S	2204.5	2205	1.5	3.8	1.9		
27	260	ONDR	44	NS	0630.0E		465.0D	35			
	3750	TYKW	45	C	0119.0	0121.0	15.0	63	7		
	2000	TYKW	45	C	0119.0	0121.9	11.0	85	15		
	1000	TYKW	47	GB	0119.0	0121.1	11.0	840	60		
	9400	TYKW	45	C	0119.0	0121.0	10.0	94	9		RAIN
	17000	NOBE	7	C	0120.6	0121.0	2.0	41			L
	2930	VORO	45	C	0122.0	0127	13.0	121			
	1000	TYKW	5	S	0137.0	0137.3	.6	1	.3		
	2000	TYKW	5	S	0137.0	0137.2	.5	1	.3		
	1000	TYKW	45	C	0139.0	0139.1	1.0	1.5	.3		
	2000	TYKW	5	S	0140.0	0158	40.0	2.5	1		
	3750	TYKW	5	S	0145.0	0158	45.0	10	2.5		
	1000	TYKW	45	C	0152.0	0152.6	2.0	3	.7		
	2000	TYKW	21	GRF	0240.0	0415	190.0	3	1.5		
	3750	TYKW	20	GRF	0245.0	0420	180.0	4	2		
	2000	TYKW	5	S	0254.5	0255.4	2.0	1.5	.5		
	3100	CRIM	24	R	0606.0	0724.0		10			
	29	UPIC	4	S/F	0738.0	0738.3	.6				
	33	UPIC	4	S/F	0738.0	0738.2	.8				
	9100	GORK	1	S	0955.6	0956.1	1.2	7	3.5		
	3200	BERN	3	S	0958.0	1000.6	12.0	.0			ONLY PAPER REC
	5200	BERN	3	S	0958.0	1000.6	12.0	11.0			ONLY PAPER REC
	9400	HUAN		S	1347.2	1354.1	14.2	3.5	1.8		0
	2800	OTTA	1	S	1350.0	1350.8	1.2	3.8	1.3		
	2800	OTTA	21	GRF	1445.0	1540	90.0	2.4	1.8		
	2650	DWIN	2	S/F	1459.0	1459.5	1.0	60	40		
	3200	BERN	4	S/F	1459.0U	1500.2	2.0U	.0			ONLY PAPER REC
	5200	BERN	4	S/F	1459.0U	1500.2	2.0U	23.0			ONLY PAPER REC
	930	BORD	41	F	1459.4	1500.6	1.6	9	2		
	2800	OTTA	3	S	1459.5	1500	1.0	26.8	9.0		
	2800	OTTA	20	GRF	1645.0		85.0	5.8			

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

SEPTEMBER 1980

DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1}		INT	POLARIZATION OR REMARKS
				UT	UT	MINUTES	PEAK	MEAN		
27	2800	OTTA	20 GRF	2035.0	2043	25.0	3.8	1.9		
	2800	OTTA	20 GRF	2146.0	2150	15.0	3.8	1.9		
	1000	TYKW	5 S	2303.6	2303.8	.6	9	3		
28	3750	TYKW	20 GRF	0140.0	0210	100.0	4	2		
	2000	TYKW	20 GRF	0140.0	0210	100.0	3	1.5		
	9400	TYKW	21 GRF	0430.0	0450	50.0	2	1		
	3750	TYKW	21 GRF	0430.0	0445	50.0	2	1		
	2000	TYKW	20 GRF	0430.0	0435	50.0	2	1		
	3750	TYKW	5 S	0432.0	0433.2	4.0	4	1.5		
	9400	TYKW	5 S	0432.5	0433.2	2.0	4.5	1.5		
	2000	TYKW	45 C	0600.0	0603.0	12.0	3	1 D		
	1000	TYKW	45 C	0603.0E	0603.1	4.0D	13	2.5D		
	6100	KISV	1 S	0712.0	0712.3	1.0	5			
	2950	GORK	1 S	0855.6	0856.0	1.3	6.0	3.0		
	536	ONDR	4 S/F	0955.0	0956	1.5	162	17		
	2650	DWIN	1 S	0955.0	0956	2.0	10	5		
	9500	POTS	1 S	0955.5	0956.1	2.0	5.5			
	1470	POTS	3 S	0955.5	0956.4	3.5	11			
	6100	KISV	4 S/F	0955.5	0956.3	1.5	6			
	8400	BERN	3 S	0955.6	0956.1	2.5	6.0			
	3200	BERN	3 S	0955.6	0956.5	3.0	.0			ONLY PAPER REC
	5200	BERN	3 S	0955.6	0956.2	4.0	6.0			
	930	BORD	41 F	0955.8	0956.3	1.4	11	2		
	260	ONDR	42 SER	0956.0	0956	111.0	36			
	3000	POTS	3 S	0956.5	0956.8	1.5	7.8U			
	930	BORD	41 F	1132.7	1133.6	1.2	70	2		
	536	ONDR	2 S/F	1230.5	1230.7	.5	32	2		
	260	ONDR	42 SER	1312.0	1447.8	107.0	24			
	2800	OTTA	23 GRF	1355.0	1420	135.0	3.0			
	536	ONDR	42 SER	1423.0	1424.2	3.5	34			
	2800	OTTA	1 S	1423.0	1423.5	2.0	2.6	1.3		
	930	BORD	46 C	1423.4	1423.6	.8	20	3		
29	260	ONDR	41 F	0652.0E	0702.8	41.0D	34	3		
	536	ONDR	8 S	0840.0	0840	.2	53			
	6100	KISV	1 S	0840.0	0840.3	1.0	2			
	260	ONDR	42 SER	0929.5	0932.5	15.0	8			
	33	UPIC	4 S/F	1111.5	1112	1.7				
	29	UPIC	4 S/F	1111.7	1112.4	1.7				
	260	ONDR	42 SER	1141.0	1149.3	27.0	10			
	536	ONDR	42 SER	1221.8	1222.7	9.0	28			
	2800	OTTA	20 GRF	1600.0	1612	40.0	2.4	1.7		
	2800	OTTA	21 GRF	1653.0	1658	27.0	5.2	2.6		
	2800	OTTA	3 S	1655.6	1656.1	1.0	32.0	8.0		
	2800	OTTA	32 ABS	1730.0	1740	25.0	-3.2	-1.6		
	17000	NOBE	1 S	2239.9	2240.0	.6	39			0
30	2000	TYKW	20 GRF	0430.0	0440	100.0	4	2		
	3750	TYKW	20 GRF	0430.0	0445	110.0D	6	3.5D		
	9400	TYKW	20 GRF	0430.0	0510	120.0	5	3		
	1000	TYKW	45 C	0507.5	0508.3	3.5	4	1		
	1000	TYKW	45 C	0628.5	0629.4	1.5	8	2		
	1000	TYKW	45 C	0633.0	0633.3	.6	8	2.5		
	1000	TYKW	45 C	0733.2	0733.4	.5	2.5	1		
	1000	TYKW	5 S	0735.0	0735.2	.6	11	4		
	260	ONDR	41 F	0743.0	0744.2	4.0	10	2		
	234	POTS	42 SER	0743.4	0745.3	2.0	170	1		III
	113	POTS	42 SER	0743.5	0744.4	2.7	700	8		III
	29	UPIC	45 C	0744.2	0744.6	1.8				
	33	UPIC	45 C	0744.3	0744.6	2.0				
	260	ONDR	4 S/F	0952.0	0952.6	2.0	19	1		
	1470	POTS	40 F	1130.0	1149.2	25.0	6.6			
	204	IZMI	41 F	1147.8	1149.0	7.2	1500			
	3000	POTS	40 F	1148.0	1152.9		7.7U			
	9500	POTS	20 GRF	1148.0	1149	12.0	4.0			
	536	ONDR	45 C	1148.0	1152.6	5.0	76	5		
	228	HARS	45 C	1148.5	1148.9	6.6	1000	360 U		
	33	UPIC	45 C	1148.6	1149.3	4.7				
	8400	BERN	41 F	1148.7	1149.5	11.0	5.0			ONLY PAPER REC
	234	POTS	41 F	1148.8	1149.4	4.4	1350	25		III
	113	POTS	42 SER	1148.8	1149.5	4.4	9000	250		III
	29	UPIC	45 C	1148.8	1149.3	4.5				
	930	BORD	41 F	1149.0	1152.7	4.5	75	3		
	260	ONDR	46 C	1149.0	1152.4	7.0	145	17		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

SEPTEMBER 1980

DAY OF MONTH	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	POLARIZATION OR REMARKS
	2800	OTTA	20 GRF	1225.0		255.0	4.0			
	2800	OTTA	21 GRF	1800.0	1850	180.0	14.0	7.0		
[	2800	OTTA	46P C	1810.0	1821.3	30.0	87.0	23.0		
	9400	HUAN	S	1812.8	1822.5	43.8	31.1	17.1		R
	2800	OTTA	20 GRF	1930.0	1933	20.0	3.2	1.2		
	1000	TYKW	45 C	2335.3	2335.6	.5	14	6		

Reports are received routinely from the following observatories:

ARCE = Arcetri
BERN = Berne
BORD = Bordeaux
CRIM = Crimea
DWIN = Dwingeloo
GORK = Gorky
HARS = Harestua
HIRA = Hiraiso
HUAN = Huancayo
IRKU = Irkutsk
IZMI = IZMIRAN
KISV = Kislovodsk
KRAK = Krakow
MANI = Manila
NAGO = Nagoya
NOBE = Nobeyama
ONDR = Ondrejov
OTTA = Ottawa
PENT = Penticton
POTS = Potsdam
SOAP = Sao Paulo
SGMR = Sagamore Hill
SYDN = Sydney
TORN = Torun
TYKW = Toyokawa
TRST = Trieste
UPIC = Upice
VORO = Voroshilov

Explanation of Type Code:

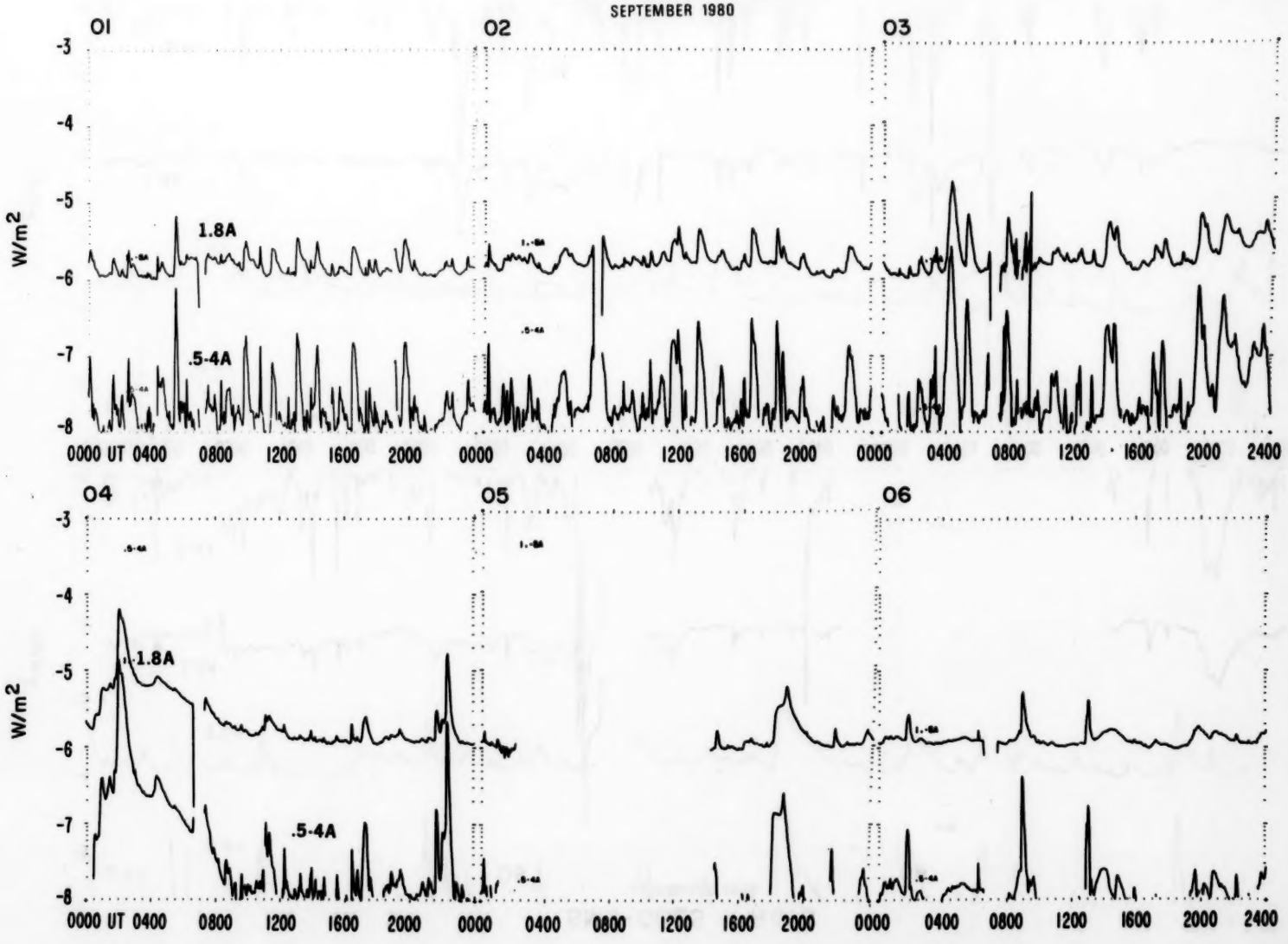
1 Simple 1
2 Simple 1F
3 Simple 2
4 Simple 2F
5 Simple
6 Minor
7 Minor +
8 Spike
20 Simple 3
21 Simple 3A
22 Simple 3F
23 Simple 3AF
24 Rise
25 Rise A
26 Fall
27 Rise and Fall
28 Precursor
29 Post Burst Increase
30 Post Burst Increase A
31 Post Burst Decrease
32 Absorption
40 Fluctuation
41 Group of Bursts
42 Series of Bursts
43 Onset of Noise Storm
44 Noise Storm in Progress
45 Complex
46 Complex F
47 Great Burst
48 Major
49 Major +

1A Simple 1A
2A Simple 1AF
3A Simple 2A
4A Simple 2AF
21A Simple 3A GRF
24O Rise only
24OF Rise only F
24P Post Rise
24PF Post Rise F
26A Fall A
26O Fall Only
26F Fall F
27F Rise and Fall F
27AF Rise and Fall AF
31A P.B. Decrease A
32A Absorption A
46F Complex F

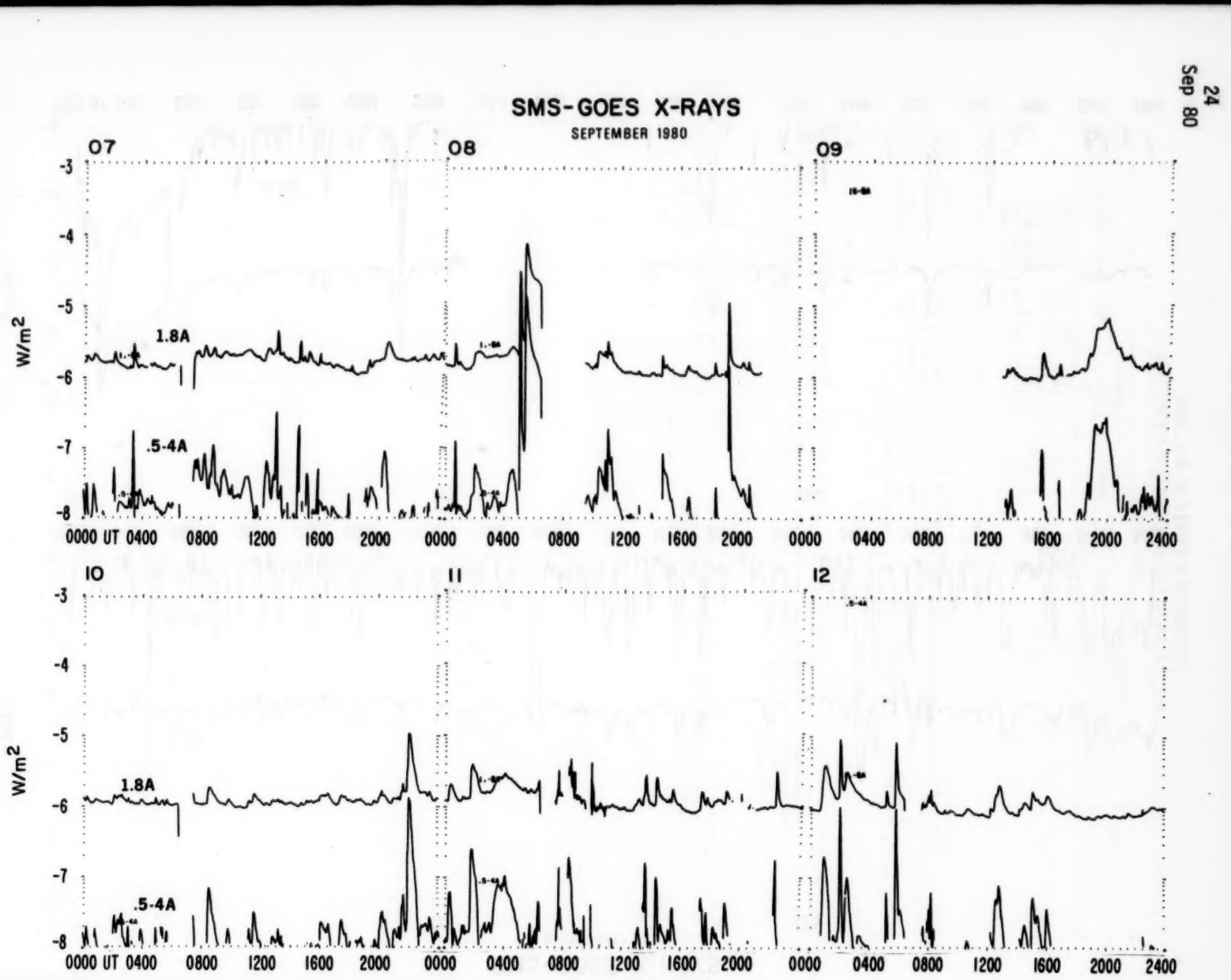
SMS-GOES X-RAYS

SMS-GOES X-RAYS

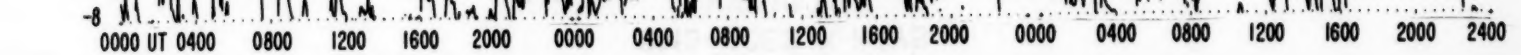
SEPTEMBER 1980



23 Sep 80

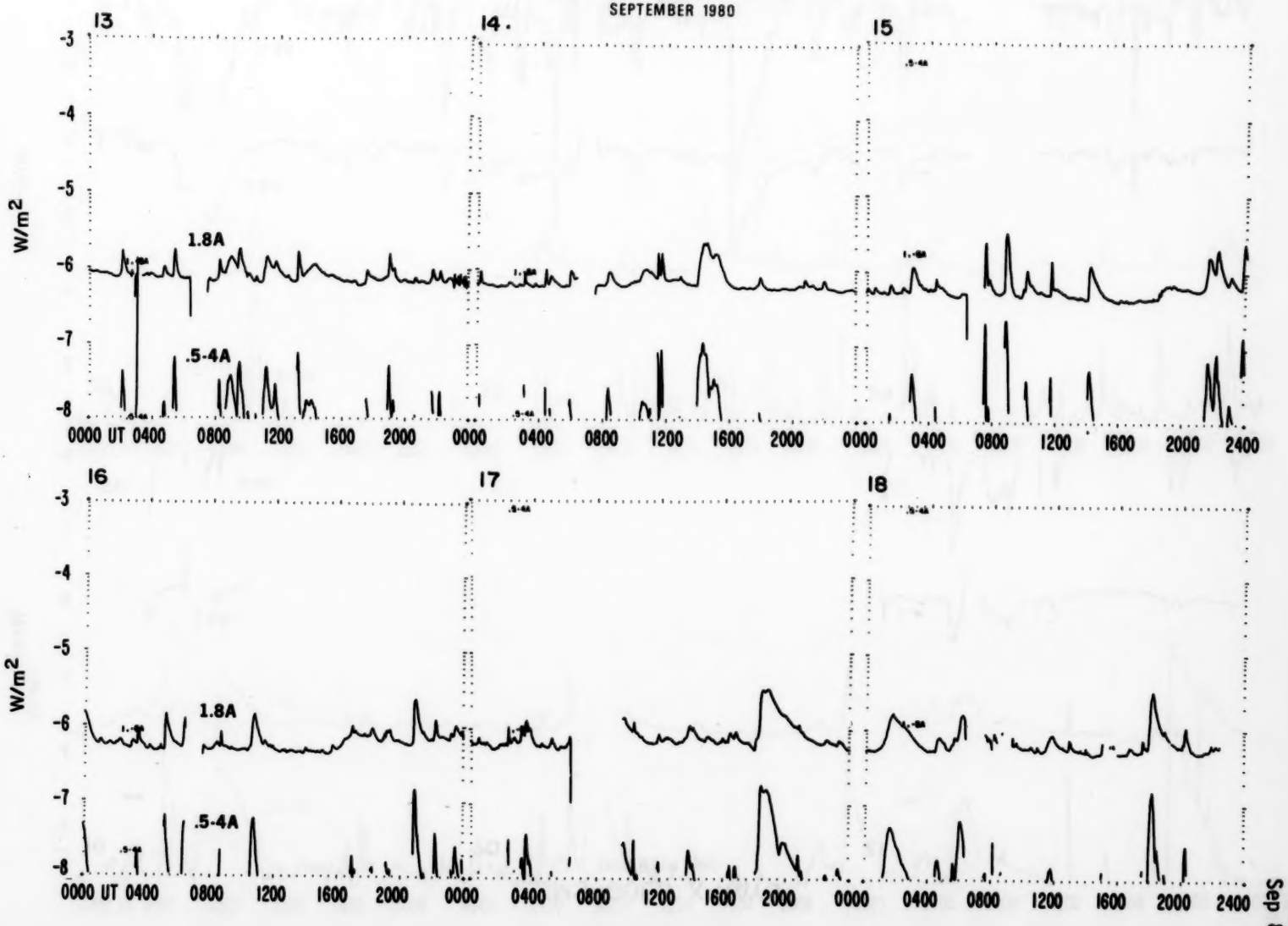


SMS-GOES X-RAYS

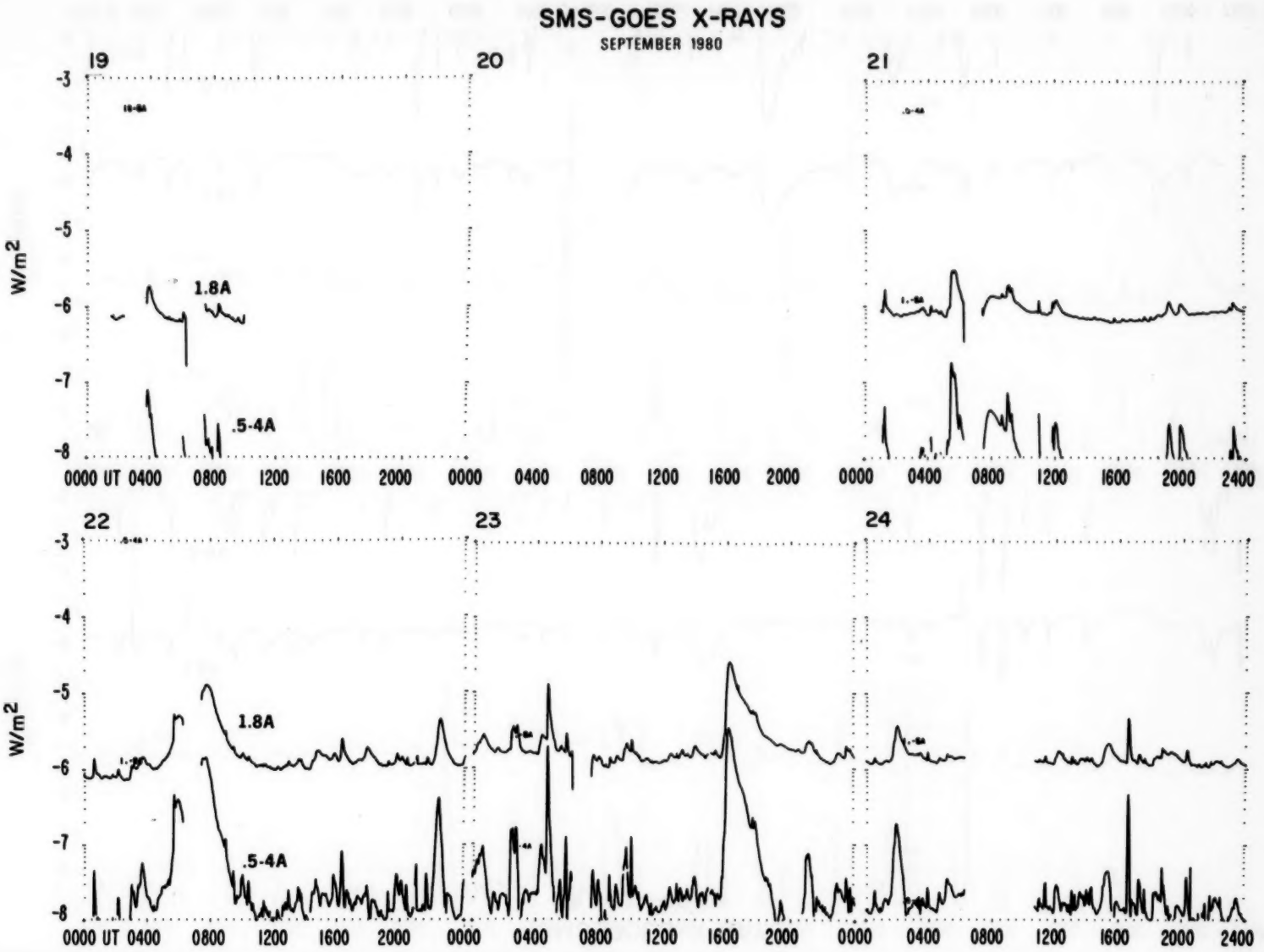


SMS-GOES X-RAYS

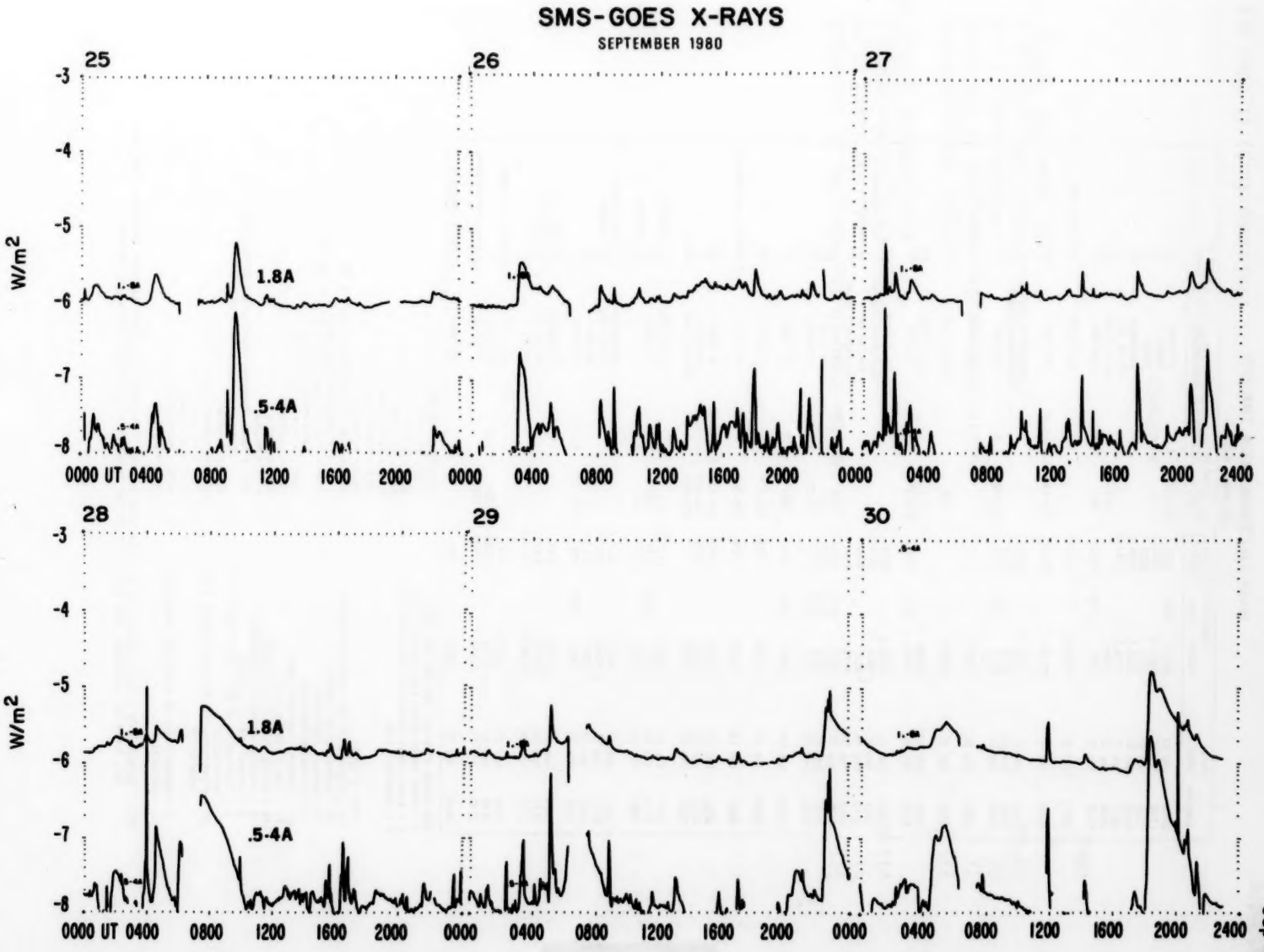
SEPTEMBER 1980



25 Sep 80



SMS-GOES X-RAYS


SMS-GOES X-RAYS
SEPTEMBER 1980
25
26
27
28
29
30
W/m2
-3
-4
-5
-6
-7
-8
1.8A
.5-4A
0000 UT 0400 0800 1200 1600 2000 0000 0400 0800 1200 1600 2000 0000 0400 0800 1200 1600 2000 2400
27 Sep 80

MASS EJECTIONS FROM THE SUN

SEPTEMBER 1980

Station	Date 1980	Observed UT Start	Max	End	Location RA°	R/R_o	Wavelength	Type of Event
BIGB	Sep 01	0013	0020	0032	061-063	1.0	H-alpha	SP
LEAR	Sep 01	0553.6		0603.2			Meter	II
CULG	Sep 01	0554		0600			Meter	II
DWIN	Sep 01	0920.5		0925.0			Decimeter	IV
WEIS	Sep 01	1135.5		1143.3			30-60 MHz	II
HAOK	Sep 01	1740U			110		White light	Flare
BIGB	Sep 01	1741	1749	1821D	063	0.991	H-alpha	SP
DWIN	Sep 02	1310.5		1313.5			Decimeter	IV Pulsations
WEND	Sep 03	0710E		0818D	115-145	1.15-1.40	H-alpha	Q
CULG	Sep 04	0208		0212			Decimeter; meter	II
CULG	Sep 04	0215		0510			Decimeter; meter	IV
BIGB	Sep 04	2038	2105	2131	073-080	1.0	H-alpha	SP
DWIN	Sep 05	1346.0		1347.2			Decimeter	IV Pulsations
HAOK	Sep 06	2300U			135		White light	EPL
HAOK	Sep 07	0126U			171		White light	EPL
BIGB	Sep 07	1442E	1514	1528	074-077	1.0	H-alpha	SP
CULG	Sep 08	0504.5		0506			Decimeter	II
CULG	Sep 08	0526		0534			Decimeter; meter	II Herringbone
WEIS	Sep 08	0527		0532			60-220 MHz	II Harmonic
CULG	Sep 08	0550		0705			Decimeter; meter	IV
WEND	Sep 08	1027	1046	1058	078	0.99-1.03	H-alpha	S
BIGB	Sep 08	1610	1624	1653	079	0.973	H-alpha	SP
BIGB	Sep 08	1912	1913	1919	078-080	0.964	H-alpha	SP
BIGB	Sep 09	1855	1912	1945	264	1.0	H-alpha	SP
GEOR	Sep 17	1218E		1300D	263-264		H-alpha	CB
GEOR	Sep 19	1212E		1245D	282-283		H-alpha	Quiescent prominence
WEND	Sep 20	0918E		1056D	205-222	1.06-1.32	H-alpha	Q
WEND	Sep 20	1428E		1528D	348-010	1.11-1.34	H-alpha	Q
HAOK	Sep 20	1830U			025-052	1.5	White light	EPL, D
WEIS	Sep 22	1622.8		1625.2			35-140 MHz	II Harmonic
BIGB	Sep 22	1937	1947	1958	082	1.0	H-alpha	SP
HAOC	Sep 22	2125E		2327	072	2.5		EL; bubble
DWIN	Sep 23	0654.2		0657.0			Decimeter	IV Fast drift
WEIS	Sep 23	1603.5		1613.3			50-140 MHz	II Harmonic
HARV	Sep 23	1604		1613			Meter	II
BIGB	Sep 23	1618	1707	1908	104-107	1.0	H-alpha	SP
DWIN	Sep 24	0728.1		0745			Decimeter	IV Fast drift
WEIS	Sep 24	0735.1		0742.0			50-220 MHz	II Harmonic
LEAR	Sep 24	0736.3		0743.3			Meter	II
CULG	Sep 27	0125.5		0130			Meter	Possible II, Weak
WEND	Sep 27	0706E		1614D	255	1.20	H-alpha	A
GEOR	Sep 27	1304E		1340D	226		H-alpha	Quiescent prominence
DWIN	Sep 30	0923.1		0923.3			Decimeter	IV Zebra patterns

QUALIFIERS ON START, MAX AND END TIMES
D = event ended after the tabulated time
E = event began before the tabulated time
U = uncertain time

TYPE OF EVENT
A = eruptive active region prominence
CB = coronal cloud bubble
D = coronal depletions
E = coronal enhancement
EL = coronal expanding loop
II = Type II radio burst
IVm = moving Type IV radio burst
Q = eruptive quiescent prominence
R = coronal ray or streamer
S = flare-surge if there is a known flare association
SP = flare-spray if there is a known flare association

* = movement may be caused by ionospheric refraction

REPORTING STATIONS
BIGB = Big Bear
BLEN = Bleien
CULG = Culgoora
DWIN = Dwingeloo
GEOR = Georgiana
HALE = Haleakala
HAOC = High Altitude Observatory's SMM Coronagraph/Polarimeter
HAOK = High Altitude Observatory's MARK-III Coronameter at Mauna Loa
HARV = Harvard (Fort Davis)
LEAR = Learmonth
MANI = Manila
MITK = Mitaka
NRLC = Naval Research Laboratory's White-Light Coronagraph Experiment on P78-1
PALE = Palehua
SGMR = Sagamore Hill
TELV = Tel Aviv
WEIS = Weissenau
WEND = Wendelstein
UDAI = Udaipur

NOTE: Because only a small fraction of the data taken by satellite-borne coronagraph had been analyzed at the time this table was assembled, many events are defined solely by ground-based observatory reports.

SEPTEMBER-OCTOBER 1979 DATA

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Hα SOLAR FLARES

SEPTEMBER 1979

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.		
347 CULG	01	0042	0059	0107	S21	E78	.989	16267	6.9	25	-N		C	0059	80		T	ZX
348 CULG	01	0050	0107	0119	N05	W76	.968	16239	26.3	29	?F		C	0107	180		KT	ZX
	IMP.1 NO 1 BIGB PALE																	
349 CULG	01	0141	0143	0154	N20	E28	.395	16252	2.6	13	-N		C	0143	70	.8		ZX
350 CULG	01	0315	0318	0330	N18	E46	.720	16263	4.6	15	-N		C	0318	70	1.0	L	ZX
GRP77351	01	0323>9	0341 0414+4	0430	N12	E52	.782	16264	5.0	67	1N				140	2.3	K	
CULG	01	0323	0418	0442	N09	E52	.782	16264	5.0	79	-N		C	0418	90	1.0	TK	
PALE	01	0340	0341	0342	N12	E52	.782	16264	5.1	2	-F	3	C		33		DE	
PALE	01	0401	0404	0408	N12	E52	.782	16264	5.1	7	-F	3	C		28		DE	
TACH	01	0412	0414	0430	N12	E51	.771	16264	5.0	18	1N		V	0414	194	3.1	D	
352 CULG	01	0342	0346	0355	N18	E46	.720	16263	4.6	13	-F		C	0346	60	.8	LK	ZX
353 CULG	01	0358	0405	0426	S21	E76	.984	16267	6.9	36	-N		C	0405	100		T	ZX
354 CULG	01	0401	0433U	0443	N06	W80	.983	16239	26.2	42	-F		C	0433	30		TK	ZX
355 CULG	01	0421	0424	0436	N20	E19	.382	16252	2.6	15	-N		C	0424	110	1.2		ZX
356 CULG	01	0448	0457	0512	S22	W38	.735	16253	29.4	24	-N		C	0457	30	.5		ZX
357 CULG	01	0525	0533	0549	N05	W78	.976	16239	26.4	24	-F		C	0533	50		T	ZX
358 CULG	01	0559	0600	0606	N09	E52	.782	16264	5.1	7	-N		C	0600	40	.5	T	ZX
359 ISTA	01	0620E		0633	S20	E90	1.081	16267	8.0	130	?N		V				AB	ZX
	IMP.1 NO 1 HTPR																	
360 ISTA	01	0635		0643	N11	E51	.771	16264	5.1	8	-N		V				D	ZX
GRP77361	01	0644+0	0651	0653	N21	E47	.736	16263	4.8	9	-F						D	
HTPR	01	0644	0651	0652	N20	E46	.723	16263	4.7	8	-F		C	0651	20	.3		
ISTA	01	0644		0653	N22	E48	.749	16263	4.9	9	-N		V				D	
362 HTPR	01	0731	0733	0737	N12	E52	.782	16264	5.2	6	-F		C	0733	20	.3		ZX
363 ABST	01	0734	0736	0740	N15	W81	.983	16238	26.2	6	?N		C	0736	87		D	ZX
	IMP.1 NO 1 HTPR MONT																	
364 KANZ	01	0749	0753	0801	N07	W89	.999	16239	25.7	12	-N	3						ZX
365 HTPR	01	1002	1009	1029	N20	E45	.712	16263	4.8	27	-N		C	1009	50	.7	E	ZX
366 HTPR	01	1005	1008	1015	S20	E75	.980	16267	7.0	10	-N		C	1008	30			ZX
367 KANZ	01	1217	1221	1233	N06	W89	1.000	16239	25.8	16	-N	2						ZX
368 HTPR	01	1231	1237	1253	N18	E45	.708	16263	4.9	22	-F		C	1237	20	.3	E	ZX
GRP77369	01	1425+3	1431+2	1453	N18	E43	.685	16263	4.8	28	-F						D	
LVOV	01	1425	1433	1500	N18	E42	.787	16263	4.8	35	-F		C	1433	100	1.4	D	
HTPR	01	1428	1431	1445	N18	E44	.697	16263	4.9	17	-F		C	1431	20	.3		
GRP77370	01	1437+3	1439+1	1449	N17	W76	.964	16238	26.9	12	-F							
BIGB	01	1437	1439	1449	N16	W77	.968	16238	26.8	12	-N	2	C	1439	70			
KANZ	01	1440	1440	1444D	N18	W76	.964	16238	26.9	40	-F	2						
GRP77371	01	1453+5	1505+2 1515	1534	N19	E44	.699	16263	4.9	41	-F						E	
HUAN	01	1453		1519	N18	E45	.708	16263	5.0	26	-F	*	C	1454	30	.4	E	
HOLL	01	1457	1515	1551	N20	E42	.677	16263	4.8	54	-F	*	C		75			F
BIGB	01	1457	1505	1540	N19	E44	.699	16263	4.9	43	-N	*	C	1505	80	1.1		
HTPR	01	1458	1507	1525	N19	E44	.699	16263	4.9	27	-F	*	C	1503	30	.4	E	
KANZ	01	1525E		1537	N18	E43	.685	16263	4.9	120	-N	*						
GRP77372	01	1456+2	1458+4	1518	S23	W43	.785	16253	29.4	22	-F				60	.9		
HOLL	01	1456	1458	1515	S23	W44	.794	16253	29.3	19	-F	3	C		39			
BIGB	01	1458	1502	1520	S23	W42	.686	16253	29.5	22	-N	2	C	1502	80	1.1		

Hα SOLAR FLARES

SEPTEMBER 1979

OBSERVATORY	OBSERVED UT DATE	START	MAX. PHASE	END	LOCATION APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	DURATION min.	IMPORTANCE	OBS. COND	OBS. TYPE	MEASUREMENTS TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	REMARKS	
GRP77373	01	1524+1	1525+3	1537	S14	W66	.932	0	27.7	13	-F				25		DG	
BIGB	01	1524	1526	1537	S14	W65	.926	0	27.8	13	-N	2	C	1526	30			
KANZ	01	1525E	1525	1537	S14	W68	.944	0	27.5	12D	-F	2					G	
HUAN	01	1525	1528	1534	S14	W66	.932	0	27.7	9	-F	1	C	1528	15		D	
374 BIGB	01	1601	1604	1607D	N16	W77	.968	16238	26.9	6D	-N	2	P	1604	70			ZX
375 HOLL	01	1654	1729	1742	N05	W85	.995	16239	26.3	48	-N	3	C		34			ZX
376 HOLL	01	1714	1727	1804	N20	E40	.653	16263	4.7	50	-N	3	C		33			ZX
GRP77377	01	1823+2	1824+6	1835	S14	W67	.938	0	27.7	12	-F				30		D	
BIGB	01	1823	1824	1829	S14	W67	.938	0	27.7	6	-N	3	P	1824	40			
HUAN	01	1825	1830	1840	S15	W67	.940	0	27.7	15	-F	1	C	1830	20		D	
378 BIGB	01	1851	1857	1903	S34	W90	1.002	16241	26.8	12	-N	3	C	1857	40			ZX
GRP77379	01	1947+2	1948+1	1955	N11	E43	.677	16264	5.0	8	-N				30	.4		
BIGB	01	1947	1948	1953	N11	E46	.714	16264	5.3	6	-N	3	C	1948	40	.6		
HOLL	01	1949	1949	1957	N12	E40	.639	16264	4.8	8	-B	3	C		21		DE	
380 CULG	01	2144	2148	2155	N05	W88	.999	16239	26.3	11	-F		C	2148	20		T	ZX
381 CULG	01	2211	2215	2224	N20	E04	.231	16252	2.2	13	-F		P	2215	30	.3		ZX
382 CULG	01	2234E	2240	2253	S20	E69	.957	16267	7.1	19D	-F		P	2240	20		T	ZX
383 CULG	01	2234	2241	2302	N20	E04	.231	16252	2.2	28	-F	*	C	2241	40	.4		ZX
384 BIGB	01	2322	2326	2339	S34	W90	1.002	16241	26.2	17	-N	3	C	2326	90			ZX
GRP77385	01	2324+4	2335+1	2358	S23	E72	.972	16267	7.4	34	?N						A	
CULG	01	2324	2335	0003	S23	E70	.965	16267	7.2	39	?N		C	2335	310	9.3	AT	
	IMP.2 IMP.S																	
BIGB	01	2328	2336	2352	S23	E75	.982	16267	7.6	24	-N	3	C	2336	120		A	
GRP77386	02	0006	0039+0 2452	0131	S20	E67	.947	16267	7.0	***	1N				110		FIK	
CULG	02	0006	0052	0131	S24	E68	.957	16267	7.1	85	2N		C	0052	200	6.0	FIKT	
MANI	02	0030E	0039	0047D	S19	E67	.945	16267	7.0	17D	1N	3	C		100		F	
HOLL	01	2329	2439	0043D	S20	E66	.942	16267	6.9	74D	1B	3	C		122		DE	
387 CULG	02	0133	0136	0144	N17	W88	.998	16238	26.5	11	-F		C	0136	20			ZX
388 VORO	02	0236	0237	0239	N19	E37	.613	16263	4.9	3	-F		C	0237	63	.8	EHJ	ZX
389 CULG	02	0241	0244	0250	N17	W88	.998	16238	26.5	9	-N		C	0244	30			ZX
390 CULG	02	0257	0312	0341	N13	E51	.771	16269	5.9	44	-N		C	0312	70	1.1		ZX
391 PALE	02	0303	0308	0329	S19	E65	.935	16267	7.0	26	-F	2	C		71		DE	ZX
392 CULG	02	0331	0338	0340D	N14	W03	.129	16252	1.9	17D	-F		P	0338	100	1.0		ZX
393 CULG	02	0335	0337	0400	S22	W51	.847	16253	29.3	25	-N		C	0337	80	1.5		ZX
394 CULG	02	0410	0415	0429	N26	W62	.881		28.5	19	-F		C	0415	20	.4	H	ZX
395 CULG	02	0421	0425	0435	N14	E53	.793	16269	6.2	14	-F		C	0425	50	.9		ZX
396 CULG	02	0620	0622	0629	N09	E30	.496	16264	4.5	9	-N		C	0622	60	.7		ZX
GRP77397	02	0658+4	0703+6	0724	N16	W18	.337	16252	31.9	26	1B						EGJUVW	
CULG	02	0658	0703	0712D	N17	W18	.344	16252	31.9	14D	-B		P	0703	150	1.5		
ISTA	02	0700E	0703	0723	N18	W20	.379	16252	31.8	23D	2B		V				GUVW	
ABST	02	0702E	0707	0725	N14	W16	.294	16252	1.1	23D	-N		P	0707	174	1.9	EJ	
PURP	02	0702	0705	0723	N15	W19	.345	16252	31.9	21	2B		C		755	8.1	G	
CATA	02	0705E	0705	0725	N16	W18	.337	16252	31.9	20D	-B	2	P	0705	112	1.2		
BUCA	02	0710E		0726	N17	W17	.330	16252	1.0	16D	-F		C	0710	193	2.1		
398 ISTA	02	0737	0744	0752	S21	E64	.933	16267	7.1	15	-N		V				D	ZX
399 KANZ	02	1027	1031	1047	S21	E63	.927	16267	7.2	20	-N	1						ZX
400 KANZ	02	1043		1141	S31	W90	1.002	16241	26.7	58	-N	2					A	ZX
401 KHAR	02	1112E		1140D	S20	E66	.942	16267	7.4	28D	?F		P				E	ZX
	IMP.1 NO # KANZ																	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.		
GRP77402	02	1129	1141+8	1220	N17	W89	.999	16238	26.8	51	-F							
KANZ	02	1129	1141	1220	N18	W88	.997	16238	26.9	51	-N	2						
KHAR	02	1134E	1141	1154D	N17	W90	.999	16238	26.7	20D	-F		P					
GRP77403	02	1337+8	1345+4	1409	N11	E31	.512	16264	4.9	32	-F						J	
LVOV	02	1337	1349	1412	N10	E32	.526	16264	5.0	35	-F		C	1349	150	1.8	J	
HOLL	02	1345	1345	1405	N13	E30	.501	16264	4.8	20	-F	3	C		41			
404 BIGB	02	1735	1737	1745	N15	W63	.884	16258	29.0	10	-N	2	C	1737	30	.7		ZX
405 BIGB	02	1837	1842	1932	N15	W63	.884	16258	29.1	55	-N	2	C	1842	60	1.4		ZX
406 BIGB	02	2004	2006	2008D	S25	E65	.945	16267	7.7	4D	-N	2	P	2006	20			ZX
407 BIGB	02	2029	2041	2101	S20	E65	.936	16267	7.7	32	-B	3	C	2041	50			ZX
408 BIGB	02	2255	2257	2303D	S32	W90	1.002	16241	27.2	8D	-N	3	P	2257	40			ZX
409 VORO	02	2318	2319	2323	N19	W66	.906	16258	29.0	5	-N		C	2319	45	1.1	EJ	ZX
410 VORO	02	2339	2340	2343	N07	W03	.052		2.8	4	-F		C	2341	45	.5	DJ	ZX
411 VORO	03	0030	0032	0040	S32	E14	.662	16265	4.1	10	1F		C	0032	161	2.1	EG	ZX
412 CULG	03	0120	0124	0154D	N18	E25	.448	16263	4.9	34D	-F		P	0124	60	.7		ZX
GRP77413	03	0415>9	0430>9 0459	0517	S23	E56	.887	16267	7.4	62	1N				230	4.7	EJV	
CULG	03	0415	0439	0530	S22	E55	.877	16267	7.3	75	1N		C	0439	160	3.2	F	
MITK	03	0424	0430	0513	S22	E57	.891	16267	7.5	49	1F		C	0430	200	4.3	E	
TACH	03	0426	0434	0525	S22	E56	.884	16267	7.4	59	2N		C	0434	301	6.6	E	
PURP	03	0433	0442	0502	S25	E64	.940	16267	8.0	29	2B		C		340			
HANI	03	0435E	0435	0450	S19	E55	.868	16267	7.3	15D	1B	3	C		200			
ABST	03	0457E	0459	0525	S24	E55	.883	16267	7.3	28D	1N		P	0459	131	3.4	EJ	
ABST	03	0516	0517	0520	S24	E55	.883	16267	7.3	4	1N		C	0517	131	3.4	DV	
414 CULG	03	0441	0443	0451	N15	E29	.492	16264	5.4	10	-N		C	0443	40	.5		ZX
GRP77415	03	0520+0	0522+2	0535	N17	W07	.207	16252	2.7	15	-N						DV	
ABST	03	0520	0522	0530	N17	W07	.207	16252	2.7	10	-N		C	0522	87	.9	DV	
CULG	03	0520	0524	0540	N17	W07	.207	16252	2.7	20	-N		C	0524	20	.2		
GRP77416	03	0552+3	0605+2 0620	0641	N19	W16	.334	16252	2.0	49	1N						F	
CULG	03	0552	0607	0641D	N19	W16	.334	16252	2.0	49D	1N		P	0607	220	2.3	F	
PURP	03	0555	0605	0623	N17	W17	.330	16252	2.0	28	1N		C					
CATA	03	0605E	0620	0655D	N20	W15	.331	16252	2.1	50D	1N	2	P	0620	224	2.4		
417 ABST	03	0733	0736	0750	N17	W67	.913	16258	29.3	17	?N		C	0736	131		D	ZX
	IMP.1	NO 1	PURP	CATA	KANZ													
GRP77418	03	0734+7	0745	0756	S21	W68	.953	16253	29.2	22	-F						D	
ISTA	03	0734		0758	S21	W67	.948	16253	29.3	24	-N		V				D	
KANZ	03	0741	0745	0753	S22	W69	.959	16253	29.1	12	-F	1						
GRP77419	03	0824+1	0828	0838	S21	W68	.953	16253	29.2	14	-N						E	
KANZ	03	0824	0828	0839	S22	W69	.959	16253	29.2	15	-N	1						
ISTA	03	0825		0837	S21	W67	.948	16253	29.3	12	-N		V				E	
420 KHAR	03	0915E		1025D	S22	W78	.990	16253	28.5	70D	-N		P	0919	65		DH	ZX
421 KHAR	03	0926E	0926	0936D	N12	W20	.347	16252	1.9	10D	-F		P	0926			E	ZX
422 KHAR	03	0927E		0938D	S21	W14	.521	16271	2.3	11D	-F		V	0927			D	ZX
423 KHAR	03	0930E		0939D	S20	E52	.847	16267	7.3	9D	-F		P	0935	55	1.0	D	ZX
424 KHAR	03	0948	0949	1022D	N13	E12	.227	16260	4.3	34D	-F		P	0949			DL	ZX
425 KHAR	03	0955	0957	1028D	N13	E35	.572	16269	6.0	25D	-N		P	0958	85	1.2		ZX
GRP77426	03	1156	1203	1229	N20	E17	.356	16263	4.8	33	1N						EJ	
LVOV	03	1156	1203	1228	N20	E17	.356	16263	4.8	32	1N		C	1203	300	3.2	BJ	
KHAR	03	1218E		1230D	N21	E17	.366	16263	4.8	20D	1F		P	1218	330	3.6	BE	

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OBSERVATORY	OBSERVED UT DATE	START	MAX. PHASE	END	LOCATION APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	DURATION MIN.	IMPORTANCE	OBS. CONF.	OBS. TYPE	MEASUREMENTS TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq Deg.	REMARKS	
427 KHAR	03	1218E		1230D	N13	E34	.558	16269	6.1	20D	?F		P	1218	300	3.7	B	ZX
	IMP.1 NO 1 KANZ LVOV																	
428 HOLL	03	1421	1421	1455	N12	E16	.284	16264	4.8	34	-F	3	C		24			ZX
429 BIGB	03	1759	1800	1806	N14	E34	.560	16269	6.3	7	-N	3	C	1800	10	.1		ZX
GRP77430	03	1856+1	1859+2	1918	N14	E30	.503	16269	6.0	22	-B				100	1.2	U	
BIGB	03	1856	1901	1919	N15	E32	.534	16269	6.2	23	-B	3	C	1901	70	.9		
RAMY	03	1857	1859	1915	N14	E29	.489	16269	6.0	18	-B	2	C		100		UDE	
HOLL	03	1857	1859	1921	N14	E29	.489	16269	6.0	24	-B	3	C		138		DE	
PALE	03	1905E	1905U	1917	N14	E32	.532	16269	6.2	12D	-B	2	C		109		UDE	
431 BIGB	03	1918	1920	1935	N24	W28	.525	16252	1.7	17	-F	3	C	1920	20	.2		ZX
432 HOLL	03	2101	2113	2117	N15	E30	.506	16269	6.1	16	-F	3	C		28			ZX
433 BIGB	03	2150	2155	2239D	S24	E50	.847	16267	7.7	49D	-N	3	P	2155	80	1.3		ZX
434 VORO	03	2224	2225	2228D	S21	W19	.557	16271	2.5	4D	-N		C	2225	90	1.0	E	ZX
GRP77435	04	0736	0742 0800	0805	N13	W34	.558	16252	1.8	29	-N						DK	
TELV	04	0736	0748	0748D	N13	W34	.558	16252	1.8	12D	-N	3			30	.3	K	
ABST	04	0741E	0742	0806D	N13	W34	.558	16252	1.8	25D	-N		P	0742	131	1.6	D	
TELV	04	0757	0800	0804	N13	W34	.558	16252	1.8	7	-N	3			24	.3		
436 ABST	04	0742E	0748	0806D	S21	W25	.608	16271	2.4	24D	-F		P	0748	87	1.1	D	ZX
GRP77437	04	0853>9		0940D	S21	W26	.617	16271	2.4	47	-F						EH	
KHAR	04	0853E		0940D	S22	W26	.626	16271	2.4	47D	-F	*	P	0915			EHT	
KANZ	04	0903		0914D	S21	W26	.617	16271	2.4	11D	-N	*						
GRP77438	04	0858+0	0900+1	0914	N15	W33	.548	16252	1.9	16	-N						EHL	
TELV	04	0858	0900	0904	N16	W33	.551	16252	1.9	6	-N	2			35	.4		
KHAR	04	0858E	0901	0906D	N11	W35	.570	16252	1.7	8D	-F		P	0901			HLT	
KANZ	04	0859E	0914	0914D	N15	W33	.548	16252	1.9	15D	-N	2					L	
KHAR	04	0913E		0926D	N11	W34	.556	16252	1.8	13D	-N		P	0913	150	1.9	EHLT	
439 KHAR	04	0954E		1018D	S22	W26	.626	16271	2.5	24D	-F		P				HT	ZX
GRP77440	04	0958E	1006	1017	N12	W35	.571	16252	1.8	19	-F						H	
KHAR	04	0958E		1024D	N12	W36	.585	16252	1.7	26D	-F		P	1010			HT	
KANZ	04	1002E	1006	1010	N13	W34	.558	16252	1.9	8D	-N	1						
441 KHAR	04	1101E	1118	1155D	N14	E21	.370	16269	6.0	54D	-F		P	1118			D	ZX
442 KHAR	04	1125E		1132D	N13	E90	1.000	16275	11.2	7D	-N		P	1126			DH	ZX
443 KHAR	04	1128E		1145D	S21	W28	.635	16271	2.4	17D	-F		P	1139			T	ZX
444 KHAR	04	1151E		1212D	S22	W27	.635	16271	2.5	21D	-F		P				T	ZX
	04	1320	1348	NO FLARE PATROL														
445 HOLL	04	1343	1343	1404	N15	E21	.375	16269	6.1	21	-N	3	C		114		F	ZX
	04	1407	1416	NO FLARE PATROL														
GRP77446	04	1440>9	1521 1603	1624	S21	W29	.644	16271	2.4	104	-N							
HOLL	04	1440	1521	1628	S21	W29	.644	16271	2.4	108	-N	3	C		42			
BIGB	04	1600	1603	1620	S21	W29	.644	16271	2.5	20	-N	2	C	1603	40	.5		
GRP77447	04	1518+3	1526 1538	1601	N13	W33	.544	16252	2.2	43	-F				40	.5	E	
HTPR	04	1518E		1600	N13	W30	.501	16252	2.4	42D	-F	*	C	1530	30	.3	E	
BIGB	04	1521	1526	1602	N15	W35	.576	16252	2.0	41	-F	*	C	1526	50	.6		
BIGB	04	1536	1538	1544	N12	W37	.598	16252	1.9	8	-F	*	C	1538	50	.6		
GRP77448	04	1608+6	1618+1	1654	N16	W33	.551	16252	2.2	46	-N						E	
HOLL	04	1415	1618	1641	N14	W36	.588	16252	1.9	146	1N	*	C		187		DE	
HTPR	04	1608		1712D	N19	W31	.535	16252	2.3	64D	-N	*	C	1618	50	.6	E	
HTPR	04	1610	1618	1700	N14	W34	.560	16252	2.1	50	-N	*	C	1618	40	.5	E	
BIGB	04	1614	1619	1654	N17	W33	.554	16252	2.2	40	-N	*	C	1619	120	1.5		

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX WER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	MIN.		CONF	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP77449	04	1621+8	1626+0 1637	1643	N14	E19	.340	16269	6.1	22	-F				20	.2	E	
BIGB	04	1621	1626	1643	N14	E19	.340	16269	6.1	22	-F	2	P	1626	20	.2		
HTPR	04	1623	1626	1640	N13	E23	.396	16269	6.4	17	-F		C	1626	20	.2	E	
BIGB	04	1629	1637	1655	N16	E17	.322	16269	6.0	26	-F	2	C	1637	30	.3		
450 HTPR	04	1628	1631	1651	N17	E09	.227	16263	5.4	23	-F		C	1631	20	.2	E	ZX
GRP77451	04	1658+1	1659+4	1705	N15	W35	.576	16252	2.1	7	-F				15	.2		
BIGB	04	1658	1659	1708	N12	W39	.625	16252	1.8	2	-N	*	C	1659	10	.1		
HTPR	04	1659	1703	1710	N19	W31	.535	16252	2.4	11	-F	*	C	1703	20	.2		
GRP77452	04	1704+1	1706+5	1740	N13	E21	.366	16269	6.3	36	-B				90	1.0		
HOLL	04	1704	1706	1740	N16	E21	.380	16269	6.3	36	-B	3	C		114		FDE	
BIGB	04	1704	1711	1808	N14	E16	.294	16269	5.9	64	-B	2	C	1711	90	1.0		
HTPR	04	1705		1712	N13	E22	.381	16269	6.4	7	-B		C	1707	80	.8	E	
BIGB	04	1740	1742	1822	N13	E16	.288	16269	5.9	42	-F	2	C	1742	40	.4		
GRP77453	04	1759+2	1804+3 1843	1854	S20	W30	.645	16271	2.5	55	-N							
HOLL	04	1759	1807	1845	S21	W30	.653	16271	2.5	46	-N	3	C		60			
BIGB	04	1801	1804	1821	S21	W31	.663	16271	2.4	20	-N	3	C	1804	20	.2		
BIGB	04	1836	1843	1903	S19	W31	.646	16271	2.5	27	-F	3	C	1843	20	.2		
GRP77454	04	1836>9	1842 1910	1920	N14	W39	.628	16252	1.8	44	-F							
HOLL	04	1836	1842	1914	N17	W39	.633	16252	1.9	38	-F	3	C		32			
BIGB	04	1905	1910	1925	N12	W39	.625	16252	1.9	20	-N	3	C	1910	70	.9		
455 HOLL	04	1943	1943	1951	S21	W32	.672	16271	2.4	8	-F	3	C		24			ZX
GRP77456	04	2007+2	2010+2	2029	N14	E15	.279	16269	6.0	22	-N				30	.3		
HOLL	04	2007	2012	2022	N15	E15	.286	16269	6.0	15	-N	3	C		35			
BIGB	04	2009	2010	2036	N14	E16	.294	16269	6.0	27	-B	3	C	2010	20	.2		
GRP77457	04	2048+0	2048+1	2054	N14	E16	.294	16269	6.1	6	-N				30	.3		
HOLL	04	2048	2048	2054	N15	E15	.286	16269	6.0	6	-N	3	C		35			
BIGB	04	2048	2049	2054	N14	E17	.309	16269	6.1	6	-N	3	C	2049	20	.2		
GRP77458	04	2056+1	2057 2111+0	2143	N14	E16	.294	16269	6.1	47	-N				35	.4	F	
BIGB	04	2056	2057	2104	N14	E16	.294	16269	6.1	8	-N	3	C	2057	50	.5		
HOLL	04	2057	2111	2138	N15	E15	.286	16269	6.0	41	-N	3	C		48		F	
BIGB	04	2109	2111	2148	N14	E17	.309	16269	6.2	39	-B	3	C	2111	20	.2		
459 HOLL	04	2210	2211	2223	N15	E14	.272	16269	6.0	13	-N	3	C		27			ZX
GRP77460	04	2239+4	2241+2	2308	N15	W39	.629	16252	2.0	29	-F				70	.9		
BIGB	04	2239	2242	2310	N15	W39	.629	16252	2.0	31	-F	3	C	2242	30	.4		
VORO	04	2240	2241	2243D	N15	W39	.629	16252	2.0	3D	-N		C	2241	81	1.0		
BIGB	04	2242	2243	2251	N20	W35	.591	16252	2.3	9	-F	3	C	2243	30	.4		
HOLL	04	2243	2243	2305	N13	W41	.652	16252	1.9	22	-F	3	C		66			
461 HOLL	04	2316	2317U	2318D	N15	E14	.272	16269	6.0	2D	-B	3	C		96		DE	ZX
462 VORO	04	2324E		2338	N14	E15	.279	16269	6.1	14D	-F		C	2326	90	1.0	EJ	ZX
463 VORO	05	0033	0034	0038	N15	E14	.272	16269	6.1	5	-N		C	0034	116	1.2	J	ZX
464 VORO	05	0118	0118	0122	N15	E13	.257	16269	6.0	4	?N		C	0118	287	2.9	EHJ	ZX
	IMP.1 NO : MITK																	
465 MITK	05	0408	0412	0420	N11	E12	.215	16269	6.1	12	-N		C	0412			E	ZX
GRP77466	05	0655	0657	0710	N14	E11	.221	16269	6.1	15	-N						E	
HTPR	05	0655	0657	0708	N14	E11	.221	16269	6.1	13	-N		C	0657	80	.8	E	
WEND	05	0705E		0712D	N15	E11	.230	16269	6.1	7D	-F		C	0705	56	.6		
GRP77467	05	0705+2	0708	0720	S20	W37	.713	16271	2.5	15	-N				40	.6		
WEND	05	0705E		0712D	S20	W37	.713	16271	2.5	7D	-N		C	0707	50	.7		
HTPR	05	0707	0708	0717	S21	W39	.738	16271	2.4	10	-N		C	0708	30	.4		
ISTA	05	0710E		0725	S21	W38	.729	16271	2.4	15D	-N		V				BEF	
MANI	05	0715E	0715U	0720	S20	W33	.674	16271	2.8	5D	-N	3	C		80			
468 ISTA	05	0719		0745	N12	E69	.927	16275	10.5	26	?N		V				KU	ZX
	IMP.1 NO : HTPR CATA																	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONG	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
469 TELV	05	0800	0804	0811	N21	W13	.320	16263	4.4	11	-N	3			27	.3		ZX
470 ISTA	05	0837		0858	N12	E69	.927	16275	10.5	21	?N		V				KU	ZX
	IMP.1 NO : HTPR			CATA														
471 ISTA	05	0905		0910	N21	W05	.252	16263	5.0	5	-F		V				D	ZX
GRP77472	05	1044+2	1049+1	1058	N11	W09	.168	16264	4.8	14	-F				30	.3	E	
TELV	05	1044	1049	1059	N11	W08	.152	16264	4.8	15	-N	3			32	.3		
HTPR	05	1046	1050	1057	N12	W10	.190	16264	4.7	11	-F		C	1050	30	.3	E	
473 HTPR	05	1049	1050	1055	S21	W41	.757	16271	2.4	6	-F		C	1050	20	.3		ZX
474 TELV	05	1102	1104	1112	N04	E08	.118		5.9	10	-N	3			6			ZX
475 TELV	05	1140	1144	1151	N21	W17	.365	16263	4.2	11	-N	3			30	.3		ZX
476 TELV	05	1304	1305	1310	N13	W34	.558	16252	3.0	6	-N	3			61	.7		ZX
477 TELV	05	1308	1309	1314	S02	E20	.374		7.0	6	-N	3			27	.3		ZX
GRP77478	05	1423+1	1425+0	1435	N15	E77	.969	16275	11.4	12	-N				90		A	
HTPR	05	1423	1425	1434	N14	E75	.960	16275	11.2	11	-N		C	1425	80			
BIGB	05	1424	1425	1436	N16	E79	.976	16275	11.5	12	-B	2	C	1425	100		A	
479 HOLL	05	1528	1529	1536	N19	W51	.776	16252	1.8	8	-F	3	C		26			ZX
480 HOLL	05	1654	1654	1701	N13	W51	.771	16252	1.9	7	-F	3	C		18			ZX
GRP77481	05	1802+1	1808+0	1835	N12	W13	.236	16264	4.8	33	-N				50	.5	G	
BIGB	05	1802	1808	1842	N12	W11	.205	16264	4.9	40	-N	3	C	1808	70	.7	G	
HOLL	05	1803	1808	1828	N13	W14	.258	16264	4.7	25	-N	3	C		45		F	
HUAN	05	1804E		1815D	N12	W13	.236	16264	4.8	11D	-F	1	P	1808	40	.4	E	
482 BIGB	05	1958	2012	2038	N37	W69	.933		31.7	40	-F	3	P	2012	40		G	ZX
483 BIGB	05	2012	2018	2027	N16	E02	.156	16269	6.0	15	-F	3	P	2018	30	.3		ZX
484 CULG	05	2135	2136	2140	S18	W47	.797	16271	2.4	5	-F		C	2136	20	.4		ZX
485 CULG	05	2211	2212	2218	S16	E07	.411	16276	6.4	7	-F		C	2212	60	.7		ZX
486 CULG	05	2241	2242	2244D	N09	E60	.860	16275	10.4	3D	-F		C	2242	10	.2		ZX
487 CULG	05	2335	2340	2355	S21	E14	.521	16267	7.0	20	-F		C	2340	70	.8	F	ZX
488 CULG	06	0021	0024	0031	N15	E00	.135	16269	6.0	10	-N		C	0024	80	.8	T	ZX
489 CULG	06	0042	0043	0050	S16	E06	.407	16276	6.5	8	-F		C	0043	20	.2		ZX
490 CULG	06	0122	0126	0131	N17	W60	.859	16252	1.6	9	-F		C	0126	20	.4		ZX
491 CULG	06	0213	0214	0222	N14	W04	.136	16269	5.8	9	-N		C	0214	160	1.6	T	ZX
492 ABST	06	0523	0526	0530	N14	W02	.123	16269	6.1	7	-N		C	0526	87	.9	D	ZX
493 ISTA	06	0612E		0630D	N11	E56	.823	16275	10.5	18D	-N		V				D	ZX
GRP77494	06	0613+3	0616+0 0630	0638	N14	W62	.876	16252	1.6	25	-N						J	
ABST	06	0613	0616	0638	N14	W64	.892	16252	1.5	25	1N		C	0616	174		FJ	
CULG	06	0613	0616	0625	N13	W65	.900	16252	1.4	12	-F		C	0616	50	1.0		
ISTA	06	0616		0621	N12	W62	.876	16252	1.6	5	-N		V				E	
CULG	06	0625	0630	0639	N20	W60	.861	16252	1.8	14	-N		C	0630	60	1.2		
GRP77495	06	0724+2	0726+1	0731	N14	W04	.136	16269	6.0	7	-F						EJ	
ABST	06	0724	0727	0731	N14	W04	.136	16269	6.0	7	-F		C	0727	131	1.3	EJ	
KANZ	06	0725	0726	0734	N14	W04	.136	16269	6.0	9	-F	3						
MONT	06	0726	0727	0731	N14	W05	.145	16269	5.9	5	-F		C	0727	50			
GRP77496	06	0725+5	0729+1	0758	N20	W20	.394	16263	4.8	33	-F				50	.5	EJ	
HTPR	06	0725	0730	0759	N20	W20	.394	16263	4.8	34	-F		C	0730	30	.3	E	
MONT	06	0727	0729	0752	N21	W19	.390	16263	4.9	25	-F		C	0729	50		E	
ABST	06	0727	0730	0740D	N19	W22	.413	16263	4.7	13D	-N		P	0730	131	1.4	EJ	
WEND	06	0727		0801	N20	W21	.407	16263	4.7	34	-F		C	0736	56	.7		
KANZ	06	0730	0730	0757	N22	W17	.376	16263	5.0	27	-N	3						

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OB:		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HeMATH PLAGE REGION	CMP. DAY	MIN.		CONG.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.		
GRP77497	06	0729>9	0737+5	0758	N11	E56	.823	16275	10.5	29	-F				30	.5		
HTPR	06	0729	0737	0755	N10	E57	.833	16275	10.6	26	-F		C	0737	20	.3		
WEND	06	0732		0807	N11	E56	.823	16275	10.5	35	-N		C	0738	30	.6	T	
KANZ	06	0738	0738	0753	N11	E56	.823	16275	10.5	15	-F	3						
ATHN	06	0740	0742	0801	N14	E62	.876	16275	11.0	21	-N	1		0742	49	.9		
GRP77498	06	0819+0	0819	0835	S15	E42	.734	16274	9.5	16	-F						G	
KANZ	06	0819	0819	0834	S16	E43	.749	16274	9.6	15	-F	3					G	
WEND	06	0819		0836	S15	E42	.734	16274	9.5	17	-F		C	0820	38	.5	G	
GRP77499	06	0822+1	0824+1	0829	N14	W05	.145	16269	6.0	7	-F							
MONT	06	0822	0824	0829	N14	W05	.145	16269	6.0	7	-F		C	0824	50			
KANZ	06	0823	0825	0829	N14	W05	.145	16269	6.0	6	-F	3						
GRP77500	06	0906+1	0907+0	0911	N20	W62	.877	16252	1.7	5	-F				35	.8		
HTPR	06	0906	0907	0910	N19	W60	.860	16252	1.9	4	-F		C	0907	20	.4	E	
MONT	06	0906	0907	0911	N20	W64	.892	16252	1.6	5	-F		C	0907	50		D	
KANZ	06	0907	0907	0913	N20	W62	.877	16252	1.7	6	-N	3						
GRP77501	06	0949+2	0955+2	1002	N21	W20	.402	16263	4.9	13	-F						E	
KANZ	06	0949	0957	1005	N21	W21	.415	16263	4.8	16	-F	3						
MONT	06	0951	0955	0958	N21	W20	.402	16263	4.9	7	-F		C	0955	60		E	
502 TELV	06	1148	1151	1201	N18	W67	.913	16252	1.5	13	-F	3			16		T	ZX
GRP77503	06	1210+2	1211+1	1224	N22	W60	.862	16252	2.0	14	1N				110	2.3	F	
WEND	06	1210	1212	1224	N22	W60	.862	16252	2.0	14	1N		C	1212	105	2.3		
TELV	06	1211	1211	1226	N18	W65	.899	16252	1.6	15	-N	3			61		F	
TELV	06	1211	1212	1214	N19	W56	.825	16252	2.3	3	-N	3			49	.9	F	
KANZ	06	1212	1212	1223	N22	W63	.885	16252	1.8	11	1N	2						
GRP77504	06	1332+1	1336	1346	N16	W63	.884	16252	1.8	14	-N				80	1.8		
WEND	06	1332		1339D	N17	W63	.884	16252	1.8	7D	-N		C	1337	80	1.9		
HOLL	06	1333	1336	1346	N16	W64	.892	16252	1.8	13	-N	3	C		80			
505 HOLL	06	1350	1355	1402	N17	W61	.868	16252	2.0	12	-F	3	C		30			ZX
506 HOLL	06	1411	1412	1418	N17	W61	.868	16252	2.0	7	-F	3	C		19			ZX
GRP77507	06	1534+1	1537+2	1557	N17	W61	.868	16252	2.1	23	1F				110	2.3		
BIGB	06	1534	1537	1557	N18	W60	.860	16252	2.1	23	1N	2	C	1537	120	2.5		
HOLL	06	1535	1539	1556	N17	W63	.884	16252	1.9	21	-F	3	C		103			
508 BIGB	06	1601	1604	1610	N21	W66	.907	16252	1.7	9	-N	2	C	1604	20			ZX
GRP77509	06	1636>9	1637 1646+1	1656	N16	W65	.899	16252	1.8	20	-N				50	1.2		
BIGB	06	1636	1637	1700	N16	W64	.892	16252	1.9	24	-N	2	C	1637	20	.5		
HOLL	06	1637	1647	1657	N17	W64	.892	16252	1.9	20	-B	3	C		64		DE	
BIGB	06	1645	1646	1658	N16	W68	.920	16252	1.6	13	-N	2	C	1646	50			
WEND	06	1646		1654	N17	W65	.899	16252	1.8	8	-F		C	1648	30			
HUAN	06	1646		1653	N15	W68	.920	16252	1.6	7	-F	1	C					
510 BIGB	06	1930	1932	1945	N23	W26	.493	16263	4.9	15	-F	2	C	1932	30	.3		ZX
511 BIGB	06	1950	1951	2011	S17	W05	.418	16276	6.5	21	-N	2	C	1951	20	.2		ZX
	06	2040	2055	NO FLARE PATROL														
512 BIGB	06	2055E	2055	2100	N10	E48	.737	16275	10.5	5D	-N	2	P	2055	40	.6		ZX
513 EIGB	06	2103	2104	2112	N20	W65	.899	16252	2.0	9	-N	2	C	2104	50			ZX
GRP77514	06	2205+0	2207+0	2229	N18	E49	.753	16275	10.6	24	-F				45	.7		
BIGB	06	2205	2207	2212D	N18	E49	.753	16275	10.6	7D	-N	2	P	2207	30	.5		
CULG	06	2205	2207	2229	N19	E50	.765	16275	10.7	24	-F		C	2207	60	1.0		
515 VORO	06	2224	2226	2230	N12	W14	.252	16269	5.9	6	-F		C	2226	36	.4	DHJ	ZX
516 VORO	06	2236	2238	2243	N19	E51	.776	16275	10.8	7	-F		C	2238	45	.7	D	ZX
517 CULG	06	2244	2250	2317	N21	W35	.595	16263	4.3	33	-N		C	2250	120	1.6	UV	ZX
GRP77518	06	2354+3	2356+1	2359	S16	W07	.411	16276	6.5	5	-F				90	1.0		
CULG	06	2354	2356	2359	S16	W07	.411	16276	6.5	5	-N		C	2356	110	1.2		
VORO	06	2357	2357	2359D	S16	W07	.411	16276	6.5	2D	-F		C	2357	72	.8		

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
519 VORO	07	0020	0021	0025	N20	W70	.932	16252	1.8	5	-N		C	0022	36		D	ZX
GRP77520	07	0055+2	0057+2	0116	S17	W06	.422	16267	6.6	21	1B						HJLSZ	
CULG	07	0055	0057	0120	S16	W08	.416	16267	6.4	25	2B		C	0057	460	5.1	SLH	
VORO	07	0057	0059	0111	S17	W06	.422	16267	6.6	14	1N		C	0059	197	2.1	EHJ	
BIGB	07	0057	0058	0102D	S17	W08	.431	16267	6.4	5D	-B	1	P	0058	40	.4		
MANI	07	0100E	0100U	0110D	S18	W05	.434	16267	6.7	10D	-B	3	C		180		ZDE	
PALE	07	0105E	0105U	0105D	S18	E00	.427	16267	7.0		-F	2	C		42		F	
521 VORO	07	0134	0137	0144	N15	W16	.301	16269	5.9	10	-N		C	0137	99	1.0	EH	ZX
522 CULG	07	0216	0219	0230	N15	W15	.286	16269	6.0	14	-F		C	0219	100	1.0	T	ZX
523 CULG	07	0311	0316	0323	S15	W08	.401	16276	6.5	12	-F		C	0316	60	.7		ZX
524 CULG	07	0352	0359	0406	N15	W15	.286	16269	6.0	14	-F		C	0359	50	.5	KT	ZX
525 CULG	07	0408	0411	0415	N13	W39	.626	16260	4.2	7	-F		C	0411	70	.9	L	ZX
526 CULG	07	0425	0433	0508	N21	W72	.943	16252	1.8	43	2N		C	0433	240			ZX
527 CULG	07	0503	0518	0542	N21	W39	.644	16263	4.3	39	-F		C	0518	80	1.0		ZX
ZX GRP77528	07	0515+1	0519+2	0534	S19	W10	.470	16276	6.5	19	-N						DL	
CULG	07	0515	0519	0541	S18	W12	.468	16276	6.3	26	1N		C	0519	250	2.8	L	
ABST	07	0516	0521	0526	S20	W09	.480	16276	6.5	10	-N		C	0521	87	1.0	D	
529 CULG	07	0531	0535	0556	N16	W74	.955	16252	1.7	25	-N		P	0535	60			ZX
GRP77530	07	0551	0556+1	0607	N15	E53	.793	16275	11.2	16	-F				60	1.0	E	
CULG	07	0551	0556	0607	N15	E51	.772	16275	11.1	16	-F		C	0556	40	.6		
ABST	07	0555E	0557	0605D	N15	E55	.813	16275	11.4	10D	-F		P	0557	87	1.5	E	
GRP77531	07	0609+8	0622 0629	0655	N15	W17	.315	16269	6.0	46	-F				120	1.3	FJ	
ZX CULG	07	0609	0629	0700	N15	W18	.330	16269	5.9	51	-N		C	0629	130	1.3	FT	
BUCA	07	0616		0655	N15	W17	.315	16269	6.0	39	-F		C	0630	107	1.2		
ZX ABST	07	0617	0622	0640	N15	W16	.301	16269	6.1	23	-F		C	0622	131	1.4	FJ	
GRP77532	07	0634+2	0637+4	0644	N18	W70	.932	16252	2.0	10	-N						DV	
CULG	07	0634	0641U	0648	N21	W71	.938	16252	1.9	14	-F		P	0641	20			
ABST	07	0636	0637	0640	N15	W70	.933	16252	2.0	4	1N		C	0637	87		DV	
ZX 533 CULG	07	0700	0708	0711	N15	E49	.750	16275	11.0	11	-F		C	0708	60	1.0		ZX
534 HTPR	07	0810	0812	0815	N15	E45	.704	16275	10.7	5	-F		C	0812	30	.5	E	ZX
GRP77535	07	0946+4	1000+2	1010	N22	W71	.938	16252	2.1	24	1N				220		F	
TELV	07	0946	1002	1014D	N22	W70	.932	16252	2.2	28D	-N	3			61		F	
HONT	07	0947	1001	1010	N22	W75	.958	16252	1.8	23	1N		C	1001	220			
LOCA	07	0950	1000	1010	N23	W70	.932	16252	2.2	20	2N		V	1000	295	8.1		
KANZ	07	0950	1002	1010	N22	W72	.943	16252	2.0	20	1N	3						
ZX 536 KANZ	07	1026	1034	1042	S15	W11	.419	16276	6.6	16	-F	3						ZX
ZX GRP77537	07	1113+1	1115+2	1131	S17	W13	.461	16276	6.5	18	-N						E	
HONT	07	1113	1115	1128	S17	W13	.461	16276	6.5	15	-N		C	1115	70		E	
KANZ	07	1114	1117	1133	S17	W13	.461	16276	6.5	19	-N	3						
ZX 538 KANZ	07	1149	1153	1157	S15	W12	.426	16276	6.6	8	-F	3						ZX
ZX 539 HUAN	07	1319		1323	N14	W22	.385	16269	5.9	4	-F	1	C					ZX
540 HOLL	07	1506	1509	1519	N15	W22	.389	16269	6.0	13	-F	3	C		21			ZX
541 HOLL	07	1515	1516	1525	N21	W37	.620	16263	4.9	10	-F	3	C		40			ZX
ZX GRP77542	07	1607+5	1613+2	1623	S17	W15	.476	16267	6.5	16	-F				30	.3		
KANZ	07	1607	1615	1626	S17	W15	.476	16267	6.5	19	-F	2						
ZX HOLL	07	1612	1614	1618	S16	W15	.463	16267	6.6	6	-F	3	C		24			
BIGB	07	1613E	1613E	1627	S17	W15	.476	16267	6.6	14D	-N	2	P	1613	30	.3		
ZX WEND	07	1613E		1619D	S17	W16	.484	16267	6.5	6D	-N		C	1613	38	.4		

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONG	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP77543	07	1615+1	1616+2	1626	N15	W22	.389	16269	6.0	11	-N				60	.7		
BIGB	07	1605	1616	1627	N15	W22	.389	16269	6.0	22	-N	*	C	1616	50	.6		
KANZ	07	1615	1618	1626	N14	W24	.415	16269	5.9	11	-N	*						
WEND	07	1615		1619D	N15	W23	.404	16269	6.0	4D	-N	*	C	1617	50	.6		
HOLL	07	1616	1616	1626	N15	W22	.389	16269	6.0	10	-N	*	C		66			
GRP77544	07	1712+1	1713+1	1719	N15	W22	.389	16269	6.1	7	-N				50	.5		
BIGB	07	1712	1713	1719	N16	W21	.380	16269	6.1	7	-N	2	C	1713	50	.6		
HUAN	07	1712	1714	1717	N15	W22	.389	16269	6.1	5	-N	1	C	1714	30	.3		
HOLL	07	1713	1713	1722	N15	W23	.404	16269	6.0	9	-N	3	C		66			
545 BIGB	07	1717	1722	1727	N11	E80	.981	16279	13.7	10	-N	3	C	1722	20			ZX
546 HOLL	07	1836	1837	1846	N17	E45	.707	16275	11.2	10	-F	3	C		27			ZX
547 HOLL	07	1908	1909	1929	N16	E38	.618	16275	10.6	21	-B	3	C		44		DE	ZX
GRP77548	07	1948+1	1950+1	2005	S17	W17	.493	16276	6.5	17	-B				140	1.6		
BIGB	07	1948	1950	2007	S17	W17	.493	16276	6.6	19	-B	3	C	1950	70	.8		
HOLL	07	1948	1951	2005	S15	W17	.468	16276	6.6	17	-B	3	C		162		DE	
PALE	07	1949	1951	2002	S17	W17	.493	16276	6.6	13	-B	3	C		135		FDE	
549 HOLL	07	2035	2038	2055	N18	E42	.672	16275	11.0	20	-F	3	C		31			ZX
GRP77550	07	2057+1	2058+1	2102	N17	W25	.443	16269	6.0	5	-B				70	.8	V	
BIGB	07	2057	2058	2102	N16	W25	.438	16269	6.0	5	-B	3	C	2058	70	.8		
HOLL	07	2058	2058	2102	N17	W25	.443	16269	6.0	4	-B	3	C		69			
CULG	07	2058	2059	2108	N17	W24	.429	16269	6.1	10	1B		C	2059	200	2.2	V	
GRP77551	07	2108+1	2109+1	2124	N17	E46	.718	16275	11.3	16	-F				25	.4		
BIGB	07	2108	2110	2129	N16	E46	.717	16275	11.3	21	-F	3	C	2110	20	.3		
HOLL	07	2109	2109	2118	N19	E46	.721	16275	11.3	9	-N	3	C		26			
552 CULG	07	2135	2142	2151	S20	W75	.980	16271	2.3	16	-F		C	2142	40			ZX
553 HOLL	07	2147	2149	2153	N16	E34	.565	16275	10.5	6	-F	3	C		42			ZX
554 CULG	07	2201	2205	2211D	N17	E63	.884		12.6	10D	-N		C	2205	10	.2	G	ZX
GRP77555	07	2206+2	2206+3	2223	N15	W25	.434	16269	6.0	17	-N				50	.6	EJ	
VORO	07	2206	2206	2212	N15	W25	.434	16269	6.0	6	-N		C	2206	63	.7	EJ	
PALE	07	2207	2209	2226	N14	W26	.445	16269	6.0	19	-F	3	C		28		DE	
CULG	07	2207	2209	2211D	N14	W25	.430	16269	6.0	4D	-N		P	2209	50	.6		
HOLL	07	2208	2208	2222	N15	W25	.434	16269	6.0	14	-N	3	C		56			
BIGB	07	2208	2209	2223	N15	W26	.448	16269	6.0	15	-N	3	C	2209	40	.5		
556 CULG	07	2337	2534U	0650	N28	E50	.783	16278	11.7	433	?N		C	2534	420	6.1	SIU	ZX
	IMP.2 NO 1 VORO MITK																	
557 CULG	07	2351	2353	0002	N17	W26	.457	16269	6.0	11	-F		C	2353	80	.9	T	ZX
GRP77558	07	2355+2	2357+1	0005	S15	W18	.477	16267	6.6	10	-N				40	.5	EJ	
CULG	07	2355	2358	0008	S16	W19	.499	16267	6.6	13	-N		C	2358	40	.5		
VORO	07	2357	2357	0001	S15	W18	.477	16267	6.6	4	-N		C	2357	36	.4	EJ	
GRP77559	08	0019+0	0020+3	0032	S15	W18	.477	16267	6.7	13	-F						EJK	
VORO	08	0019	0020	0025	S15	W18	.477	16267	6.7	6	-F		C	0020	116	1.2	EJK	
CULG	08	0019	0023	0039	S15	W18	.477	16267	6.7	20	-N		C	0023	40	.5		
560 VORO	08	0027	0027	0029	N17	W24	.429	16269	6.2	2	-N		C	0027	36	.4	D	ZX
561 CULG	08	0039	0046	0110	N25	W42	.692	16263	4.9	31	-N		C	0046	30	.4		ZX
562 CULG	08	0113	0125	0158	N16	E40	.644	16275	11.1	45	-F		C	0125	40	.5		ZX
GRP77563	08	0125+7	0133+2	0143	S17	W07	.426	16267	7.5	18	-F						EJ	
CULG	08	0125	0135	0146	S18	W08	.446	16267	7.5	21	-F		C	0135	120	1.3		
VORO	08	0132	0133	0139	S16	W07	.411	16267	7.5	7	-F		C	0133	45	.5	EJ	
GRP77564	08	0204+2	0205+3	0215	N16	E41	.656	16275	11.2	11	1F				210	2.8	ELU	
VORO	08	0204	0205	0207D	N17	E42	.671	16275	11.2	3D	1F		C	0205	161	2.2	E	
CULG	08	0206	0208	0215	N16	E40	.644	16275	11.1	9	1N		C	0208	270	3.5	UL	
565 CULG	08	0222	0225	0232	N10	E68	.922	16279	13.2	10	-F		C	0225	80			ZX
566 CULG	08	0238	0245	0307	N18	W90	.999	16252	1.4	29	-N		C	0245	30			ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
567 CULG	08	0249	0251	0255	S21	W13	.515	16267	7.1	6	-F		C	0251	40	.5		ZX
GRP77568	08	0314+5	0322+0	0335	N14	W29	.489	16269	6.0	21	-F							
CULG	08	0314	0322	0340	N15	W30	.506	16269	5.9	26	-N	*	C	0322	100	1.1	T	
PALE	08	0319	0322	0330	N14	W29	.489	16269	6.0	11	-F	*	C		23		DE	
569 CULG	08	0315	0319	0327	N13	W45	.702	16264	4.8	12	-F		C	0319	60	.8		ZX
GRP77570	08	0331+7	0337 0351	0414	N15	E39	.629	16275	11.1	43	1F						LU	
CULG	08	0331	0337	0414	N15	E39	.629	16275	11.1	43	1F		C	0337	160	2.1	L	
PALE	08	0338	0351	0407D	N15	E39	.629	16275	11.1	290	-F	3	C		49		U	
GRP77571	08	0402+3	0405+5	0428	N22	W44	.705	16263	4.9	26	-N						FU	
MANI	08	0402E	0409	0416	N21	W42	.680	16263	5.0	140	-F	3	C		100		U	
CULG	08	0403	0410	0439	N24	W44	.711	16263	4.9	36	1N		C	0410	200	2.8		
PALE	08	0405	0405	0407D	N22	W44	.705	16263	4.9	20	-N	3	C		37		F	
572 CULG	08	0436	0441	0455	N15	W30	.506	16269	5.9	19	-F		C	0441	40	.4	T	ZX
GRP77573	08	0443+3	0447+0 0458	0520	N23	W44	.708	16263	4.9	37	1N				150	2.2	EJ	
CULG	08	0443	0447	0525	N24	W44	.711	16263	4.9	42	1N		C	0447	160	2.2		
TACH	08	0446	0447	0510	N23	W43	.697	16263	5.0	24	1F		C	0447	141	2.0	E	
ABST	08	0457	0458	0520	N21	W46	.725	16263	4.8	23	-N		C	0458	131	1.8	EJ	
574 CULG	08	0521	0522	0526	N10	E70	.934	16279	13.5	5	-F		C	0522	30			ZX
575 CULG	08	0530	0532	0545	S16	W23	.538	16276	6.5	15	-N		C	0532	140	1.7	H	ZX
GRP77576	08	0625+5	0629+1	0644	S16	W26	.569	16276	6.3	19	-N							
CULG	08	0625	0629	0650	S16	W25	.559	16276	6.4	25	1N		C	0629	280	3.4		
HTPR	08	0628	0630	0642	S17	W27	.589	16276	6.2	14	-F		C	0630	30	.3	E	
CATA	08	0630	0630	0645	S17	W25	.568	16276	6.4	15	-N	2	C	0630	56	.7		
WEND	08	0637E		0645	S15	W25	.549	16276	6.4	8D	-N		C	0637	32	.4	B	
ISTA	08	0640E		0643	S16	W27	.580	16276	6.3	3D	-N		V				BD	
GRP77577	08	0644+6	0649 0657+3	0711	S22	W86	1.000	16271	1.8	27	1N				60		ADJ	
ISTA	08	0644		0715	S23	W90	1.001	16271	1.5	31	2B		V				A	
WEND	08	0645	0657	0710	S22	W80	.994	16271	2.3	25	-N		C	0657	40		A	
CULG	08	0646	0658	0707D	S21	W89	1.000	16271	1.6	21D	1B		C	0658	60		J	
ATHN	08	0646	0649	0705	S21	W78	.989	16271	2.4	19	-B	3	C		64		DE	
CATA	08	0650	0700	0715	S24	W90	1.001	16271	1.5	25	1F	2	C	0700	56			
ABST	08	0654	0657	0710	S29	W86	1.000	16271	1.8	16	1N		C	0657	87		AD	
578 ISTA	08	0728		0732	N17	W27	.471	16269	6.3	4	-N		V				E	ZX
GRP77579	08	0840+3	0845+3	0852	S17	W26	.578	16276	6.4	12	-F				60	.7	D	
KANZ	08	0840	0848	0851	S17	W26	.578	16276	6.4	11	-F	2						
MONT	08	0843	0845	0852	S17	W25	.568	16276	6.5	9	-F		C	0845	50		D	
CATA	08	0845E	0845	0855	S17	W26	.578	16276	6.4	10D	-N	2	P	0845	84	1.0		
GRP77580	08	0853+4	0907+3	0929	N15	E36	.589	16275	11.1	36	1N				200	2.5		
HTPR	08	0853	0908	0920	N14	E34	.559	16275	10.9	27	-N		C	0908	80	1.0	E	
CATA	08	0855	0910	09100	N15	E36	.589	16275	11.1	150	1B	2	P	0910	252	3.2		
MONT	08	0857	0908	0929	N16	E38	.618	16275	11.2	32	1B		C	0908	250			
KANZ	08	0857	0907	0931	N15	E36	.589	16275	11.1	34	1N	2						
WEND	08	0904E		09200	N16	E37	.605	16275	11.2	160	1N		P	0908	162	2.2	F	
581 KANZ	08	1155	1159	1203	S17	W28	.599	16276	6.4	8	-F	1						ZX
582 HUAN	08	1444		14580	N12	W38	.612	16269	5.8	14D	-F	1	P	1448	25	.3	D	ZX
GRP77583	08	1510+6	1514+8	1528	N13	E27	.457	16275	10.7	18	-N				40	.5	D	
LOCA	08	1510	1514	1528	N13	E30	.501	16275	10.9	18	-N		V	1514	61	.7		
BIGB	08	1515	1517	1531	N13	E27	.457	16275	10.7	16	-B	3	C	1517	30	.3		
KANZ	08	1515	1519	1528	N12	E27	.454	16275	10.7	13	-F	1						
HUAN	08	1516	1520	1527	N13	E28	.472	16275	10.7	11	-N	2	C	1520	25	.3	D	
WEND	08	1518E		1527	N13	E27	.457	16275	10.7	9D	-F		C	1518	44	.5		
584 BIGB	08	1817	1856E	1911	N14	W90	1.000	16252	2.0	54	-B	1	P	1856	50			ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP77585	08	1854+1	1856+1	1907	N24	W52	.793	16263	4.9	13	-N				30	.5	D	
BIGB	08	1854	1856	1911	N25	W52	.795	16263	4.9	17	-N	3	C	1856	20	.3		
HUAN	08	1854	1857	1904	N24	W53	.802	16263	4.8	10	-N	2	C	1857	20	.3	D	
PALE	08	1855	1857	1906	N24	W51	.783	16263	5.0	11	-N	3	C		38		DE	
HOLL	08	1855	1857	1908	N25	W53	.804	16263	4.8	13	-N	3	C		40			
586 PALE	08	2056	2057	2101	N15	E30	.506	16275	11.1	5	-F	3	C		21		F	ZX
587 CULG	08	2234	2236	2243	S20	W30	.645	16267	6.7	9	-F		C	2236	40	.5		ZX
588 CULG	08	2302	2307	2330	N14	E30	.503	16275	11.2	28	-F		C	2307	20	.2		ZX
589 CULG	08	2332	2352U	0020U	N14	W55	.813	16264	4.9	480	?F		C	2352	280	4.7		ZX
	IMP.1 NO 1 HOLL																	
590 CULG	08	2347	2354	0017	N24	W56	.830	16263	4.8	30	-F		C	2354	100	1.7		ZX
GRP77591	09	0004+4	0010+1	0030	N15	E29	.492	16275	11.2	26	-F						F	
CULG	09	0004	0011	0030	N15	E30	.506	16275	11.3	26	-N		C	0011	80	.9		
PALE	09	0008	0010	0029D	N15	E28	.477	16275	11.1	210	-F	3	C		33		F	
GRP77592	09	0151>9	0200 0244+7	0325	N14	E26	.445	16275	11.0	94	1N						FU	
PALE	09	0151	0200	0232	N15	E27	.483	16275	11.1	41	-N	3	C		103		F	
PURP	09	0210	0244	0325	N13	E24	.412	16275	10.9	75	1N		C					
CULG	09	0232	0251	0326	N15	E21	.477	16275	11.2	54	1B		C	0251	340	3.9		
CULG	09	0248	0246	0307	N09	E18	.307	16275	10.5	27	-N		C	0246	50	.5	F	
MANI	09	0241	0246	02560	N15	E28	.477	16275	11.2	150	-N	3	C		50		F	
PALE	09	0243E	0248U	0309	N16	E29	.495	16275	11.3	260	1B	3	C		199		U F	
593 CULG	09	0313	0318	0324	N20	W59	.852	16263	4.7	11	-F		C	0318	30	.6		ZX
594 CULG	09	0649	0654	0658	N20	W59	.852	16263	4.9	9	-F		C	0654	20	.4		ZX
595 ISTA	09	0748		0825	N14	W44	.691	16269	6.0	37	-F		V				EK	ZX
596 ISTA	09	0818	0825	0835	S20	W32	.664	16267	6.9	17	-N		V				D	ZX
GRP77597	09	0920+0		0935	N15	E23	.404	16275	11.1	15	-F							
WENO	09	0920		0935	N15	E24	.419	16275	11.2	15	-F		C	0922	60	.7		
KANZ	09	0920		09200	N15	E23	.404	16275	11.1		-F	2						
598 CATA	09	1000	1000	1005D	N14	E57	.832	16279	13.7	50	-N	2	P	1000	28	.5		ZX
GRP77599	09	1058+1	1101+8	1109	N12	W51	.771	16269	5.6	11	-N							
KANZ	09	1058	1101	1109	N12	W50	.760	16269	5.7	11	-N	2						
TELV	09	1059	1101U	1109	N12	W52	.782	16269	5.6	10	-N	2			40	.6		
600 KANZ	09	1144	1144	1152	N19	E16	.334	16275	10.7	8	-F	2						ZX
601 KANZ	09	1210	1214	1222	N13	E56	.822	16279	13.7	12	-N	2						ZX
GRP77602	09	1254+8	1256	1320	N12	W48	.737	16269	5.9	26	-F						D	
TELV	09	1254	1256U	1325D	N12	W48	.737	16269	5.9	310	-N	2			40	.6		
HUAN	09	1302		1315	N13	W48	.738	16269	5.9	13	-F	1	C	1308	20	.3	D	
GRP77603	09	1354+4	1358 1416	1424	N11	W52	.782	16269	5.7	30	-N						F	
KANZ	09	1354	1358	1410	N12	W52	.782	16269	5.7	16	-N	2						
HUAN	09	1358		1408D	N10	W52	.782	16269	5.7	100	-F	1	P	1400	35	.5		
HOLL	09	1358	1416	1438	N11	W54	.803	16269	5.5	40	-N	3	C		50		F	
604 HUAN	09	1403		1408D	N14	E56	.822	16279	13.8	50	-N	1	P	1405	20	.3	D	ZX
GRP77605	09	1623+1	1624+5	1634	N11	E55	.813	16279	13.8	11	-N						E	
RAMY	09	1526	1629	1636	N16	E59	.851	16279	14.1	70	-N	3	C		262			
BIGB	09	1623	1624	1634	N10	E55	.813	16279	13.8	11	-N	3	C	1624	60	1.1		
HUAN	09	1624		1632	N11	E55	.813	16279	13.8	8	-F	1	C				E	
GRP77606	09	1722+0	1723+3	1733	N12	W49	.749	16269	6.0	11	-N				30	.5		
BIGB	09	1722	1726	1732	N13	W49	.749	16269	6.0	10	-N	3	C	1726	40	.6		
PALE	09	1722	1723	1734	N12	W49	.749	16269	6.0	12	-N	3	C		19		DE	
607 BIGB	09	1728	1729	1742	N13	E53	.792	16279	13.7	14	-N	3	C	1729	20	.3		ZX

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.		
GRP77608	09	1922+2	1922+2	1935	N14	E53	.793	16279	13.8	13	-N				50	.8	E	
BIGB	09	1922	1922	1937	N13	E52	.782	16279	13.7	15	-B	3	C	1922	50	.8		
HUAN	09	1924	1924	1933	N15	E54	.803	16279	13.9	9	-N	2	C	1924	60	.9	E	
609 HUAN	09	2039	2041	2048	N11	E54	.803	16279	13.9	9	-N	1	C	2041	50	.8	E	ZX
GRP77610	09	2048+4	2055 2105	2109D	N14	W51	.771	16269	6.0	21	-N						E	
CULG	09	2048	2105	2151	N15	W52	.783	16269	6.0	63	-N	*	C	2105	90	1.4		
HUAN	09	2052	2055	2109	N13	W51	.771	16269	6.0	17	-N	*	C	2055	30	.4	E	
611 CULG	09	2050	2053	2105	N08	E54	.804	16279	13.9	15	-F		C	2053	50	.9		ZX
612 VORO	09	2231	2233	2240	S19	W43	.764	16267	6.7	9	-N		C	2233	54	.8	DJ	ZX
613 CULG	09	2331	2351U	0000	S39	E60	.952		14.5	29	-F		C	2351	20		G	ZX
GRP77614	09	2335>9	2350+0	0020	N11	E52	.782	16279	13.9	45	-F				35	.6		
CULG	09	2335	2350U	0020	N11	E52	.782	16279	13.9	45	-F		C	2350	50	.8	F	
VORO	09	2350	2350	2354D	N11	E53	.792	16279	14.0	4D	-N		C	2350	18	.2	D	
GRP77615	09	2352	2356	2359	S18	W47	.797	16276	6.5	7	-N				40	.6	D	
CULG	09	2352	2356	2359	S18	W47	.797	16276	6.5	7	-N		C	2356	40	.7		
VORO	09	2354E		2358	S18	W47	.797	16276	6.5	4D	-N		P	2356	36	.5	D	
GRP77616	10	0029+2	0032+1	0038	N08	E55	.814	16279	14.1	9	-N				80	1.4	D	
CULG	10	0029	0033	0041	N08	E55	.814	16279	14.1	12	-N		C	0033	70	1.2		
VORO	10	0031	0032	0035	N09	E55	.813	16279	14.1	4	-N		C	0032	90	1.5	D	
617 VORO	10	0127E		0136	N15	W55	.813	16269	5.9	9D	-N		C	0128	45	.7	D	ZX
GRP77618	10	0148+0	0148+0	0206	N14	W54	.803	16269	6.0	18	-F				50	.9	D	
VORO	10	0148	0148	0151	N14	W54	.803	16269	6.0	3	-N		C	0148	63	1.0	D	
CULG	10	0148E	0148U	0212D	N15	W53	.793	16269	6.1	24D	-F		P	0148	40	.7	C	
MANI	10	0159E	0159U	0206D	N13	W54	.803	16269	6.0	7D	-F	3	C		15			
619 PURP	10	0406E	0406	0415	N13	W56	.822	16269	6.0	9D	1N		P					ZX
GRP77620	10	0514+2	0516+1	0535	S22	W47	.815	16267	6.7	21	2B				360	6.0	EHV	
CULG	10	0514	0517	0545	S20	W48	.814	16267	6.6	31	2B		C	0517	560	9.5	VH	
ABST	10	0515	0516	0535	S22	W48	.823	16267	6.6	20	1B		C	0516	262	4.5	EV	
TACH	10	0516		0535	S22	W47	.815	16267	6.7	19	2N		C	0521	362	6.4	E	
PURP	10	0519E	0519	0533	S23	W47	.819	16267	6.7	14D	1B		P					
621 ABST	10	0706	0706	0720	N11	W60	.860	16269	5.8	14	-N		C	0706	87	1.7	DJK	ZX
GRP77622	10	0744+1	0745+6	0807	N13	W59	.850	16269	5.9	23	-N						DJ	
TELV	10	0744	0745	0814	N15	W58	.841	16269	6.0	30	-N	2			20	.4		
ABST	10	0745	0751	0800	N11	W60	.860	16269	5.8	15	-N		C	0751	87	1.7	DJ	
623 TELV	10	0928	0931U	1001D	N14	W60	.859	16269	5.9	33D	-N	1			20	.4		ZX
624 TELV	10	1032	1033	1033D	N15	W60	.859	16269	5.9	1D	-N	3			20	.4	K	ZX
625 TELV	10	1045	1047	1053	N15	W60	.859	16269	5.9	8	-N	3			40	.8	K	ZX
626 TELV	10	1055E	1057	1109	N15	W59	.850	16269	6.0	14D	-N	2			24	.4		ZX
627 TELV	10	1124	1129	1152	N18	E09	.240	16275	11.2	28	-N	3			32	.3	F	ZX
GRP77628	10	1357+4	1359+2	1411	N16	E04	.167	16275	10.9	14	-N				100	1.0		
RAMY	10	1357	1359	1410	N17	E09	.227	16275	11.3	13	-B	3	C		142		FDE	
HOLL	10	1401	1401	1411	N16	W01	.153	16275	10.5	10	-N	3	C		69			
629 RAMY	10	1400	1401	1409	N14	W59	.850	16269	6.2	9	-F	3	C		24			ZX
630 BIGB	10	1432	1433	1443	N14	E40	.641	16279	13.6	11	-F	3	C	1433	30	.4		ZX
GRP77631	10	1457+8	1510+2	1536	N14	W62	.876	16269	6.0	39	-N				50	1.1	F	
HOLL	10	1457	1510	1539	N14	W62	.876	16269	6.0	42	-N	4	C		71		F	
BIGB	10	1505	1512	1536	N15	W62	.876	16269	6.0	31	-B	2	C	1512	50	1.1		
RAMY	10	1505	1510	1530	N14	W60	.859	16269	6.1	25	-F	3	C		36		F	
GRP77632	10	1545+4	1549+0 1609	1611	N14	E43	.679	16279	13.9	26	-F				45	.6		
BIGB	10	1545	1549	1624	N17	E45	.707	16279	14.0	39	-N	3	C	1549	50	.7		
RAMY	10	1549	1549	1557	N13	E44	.690	16279	14.0	8	-F	3	C		37			
BIGB	10	1608	1609	1619	N14	E40	.641	16279	13.7	11	-F	3	C	1609	30	.4		

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LNG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.	
GRP77633	10	1654+1	1657 1705	1726	N14	E39	.628	16279	13.6	32	-N						
PALE	10	1654	1705	1724	N13	E40	.639	16279	13.7	30	-N	3	C		30		
HOLL	10	1655	1657	1727	N16	E39	.631	16279	13.6	32	-N	3	C		56		
GRP77634	10	1735+3	1740+1	1808	N13	W62	.876	16269	6.1	33	-B				100	2.0	F
PALE	10	1735	1741	1759	N13	W62	.876	16269	6.1	24	-N	3	C		92		F
HOLL	10	1737	1740	1810	N13	W62	.876	16269	6.1	33	-B	3	C		98		
BIGB	10	1738	1741	1808	N14	W63	.249	16269	6.0	30	-B	3	C	1741	110	1.2	
635 BIGB	10	1755	1757	1836	N14	E40	.641	16279	13.7	41	-N	3	C	1757	30	.4	ZX
	10	1952	1955	NO FLARE PATROL													
636 HOLL	10	2015	2018	2023	N14	E37	.601	16279	13.6	8	-F	3	C		23		ZX
637 HOLL	10	2147	2153	2158	S25	W28	.672	16281	8.8	11	-F	3	C		21		ZX
GRP77638	10	2239	2244+2 2253	2318D	N09	E40	.638	16279	13.9	39	-N				150	2.0	FJKLU
HOLL	10	2239	2244	2359	N10	E41	.651	16279	14.0	80	-B	2	C		161		U F
MANI	10	2242E	2250U	2306D	N09	E40	.638	16279	13.9	24D	-N	2	C		150		U F
MANI	10	2243E	2246	2305	N09	E40	.638	16279	13.9	22D	-N	3	C		150		U F
VORO	10	2244E		2318	N08	E40	.638	16279	13.9	34D	1N		C	2251	260	3.3	EJKL
HOLL	10	2249	2253	2301	N14	E34	.560	16279	13.5	12	-F	2	C		35		
639 HOLL	11	0001	0001	0008	N14	W66	.907	16269	6.1	7	-N	2	C		24		ZX
640 HOLL	11	0029	0032	0041	N14	E34	.560	16279	13.6	12	-N	2	C		50		F ZX
641 VORO	11	0107	0108	0112	N14	E34	.560	16279	13.6	5	-F		C	0108	45	.5	D ZX
GRP77642	11	0150+0	0158+1	0231	N08	E39	.625	16279	14.0	41	1N						E
PURP	11	0150	0158	0234	N09	E39	.624	16279	14.0	44	1N		C				
MITK	11	0150	0159	0227	N07	E39	.625	16279	14.0	37	1N		C	0159	180	2.4	E
GRP77643	11	0525	0527	0538	N12	E32	.528	16279	13.6	13	-N				80	.9	D
ATHN	11	0525	0527	0538	N11	E32	.527	16279	13.6	13	-N	1		0527	66	.7	
ABST	11	0529E	0529	0538	N14	E32	.532	16279	13.6	9D	-N		P	0529	87	1.0	D
644 ABST	11	0628	0630	0638	N15	W71	.939	16269	5.9	10	?F		P	0630	87		D ZX
	IMP.1	NO : PURP		CATA	YUNN												
GRP77645	11	0744+3	0745+3	0750	N25	E65	.901	16282	16.2	6	1N				120		DV
ABST	11	0744	0745	0750	N24	E65	.901	16282	16.2	6	1N		C	0745	131		DV
YUNN	11	0746E	0746	0750	N25	E66	.908	16282	16.3	4D	1F		P		116	2.6	
PURP	11	0747	0748	0749	N26	E61	.873	16282	15.9	2	1N		P				
646 MONT	11	0844	0846	0851	N16	W73	.950	16269	5.9	7	-F		C	0846	50		E ZX
GRP77647	11	0949+5	0952 1008+2	1021	N11	E31	.512	16279	13.7	32	-N				80	.9	E
HTPR	11	0949	0952	1003	N08	E35	.569	16279	14.0	14	-F		C	0952	30	.4	E
MONT	11	0954	1009	1021	N11	E31	.512	16279	13.7	27	1N		C	1009	250		
HTPR	11	0958	1008	1009	N06	E35	.570	16279	14.0	11	-F		C	1000	20	.2	E
HTPR	11	1003	1008	1020	N13	E30	.501	16279	13.7	17	-N		C	1008	80	.9	E
CATA	11	1010	1010	1025	N14	E29	.489	16279	13.6	15	-B	2	C	1010	84	.9	
648 HTPR	11	1034	1038	1039	N12	E29	.484	16279	13.6	5	-F		C	1038	20	.2	ZX
GRP77649	11	1258+3	1300+1	1309	N08	E32	.526	16279	13.9	11	-N						DJ
KANZ	11	1258	1301	1309	N08	E32	.526	16279	13.9	11	-F	1					
RAMY	11	1259	1300	1309	N09	E32	.526	16279	13.9	10	-N	3	C		36		
LVOV	11	1301	1301	1312	N08	E31	.511	16279	13.9	11	1N		C	1301	200	2.3	BDJ
GRP77650	11	1338+1	1339+4	1350	N08	E32	.526	16279	14.0	12	-F						
RAMY	11	1338	1339	1350	N09	E32	.526	16279	14.0	12	-N	3	C		35		
KANZ	11	1339	1343	1350	N08	E32	.526	16279	14.0	11	-F	2					
GRP77651	11	1342+1	1347+2 1358	1523	N15	W10	.216	16275	10.8	101	2B				560	5.7	FJKUZ
HOLL	11	1342E	1349	1524	N16	W08	.204	16275	11.0	102D	2B	3	C		701		Z U
RAMY	11	1343	1347	1524	N16	W07	.193	16275	11.0	101	1B	3	C		391		Z U
KANZ	11	1343	1349	1521	N15	W08	.191	16275	11.0	98	2B	3					
KANZ	11	1343	1348	1440	N13	W17	.304	16275	10.3	57	-B	3					F
RAMY	11	1346	1347	1413	N13	W17	.304	16275	10.3	27	-N	3	C		32		F
LVOV	11	1358	1358	1500	N16	W10	.227	16275	10.8	62	2N		C	1358	600	6.4	BEJK
BIGB	11	1409E	1409D	1427E	N15	W08	.191	16275	11.0	18D	1B	2	P	1409	260	2.7	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS AREA Millionths of Disk	CORR AREA Sq. Deg.		
GRP77652	11	1413+1	1414+2	1432	N08	E35	.569	16279	14.2	19	-N				50	.6	F	
RAMY	11	1403	1414	1429	N09	E32	.526	16279	14.0	26	-F	3	C		72		F	
KANZ	11	1413	1416	1432	N08	E35	.569	16279	14.2	19	-N	2						
BIGB	11	1414	1416	1558	N17	E35	.581	16279	14.2	104	-N	2	C	1416	30	.4		
GRP77653	11	1512+5	1516+3	1526	N10	E27	.451	16279	13.7	14	-B							
BIGB	11	1512	1516	1540	N09	E31	.511	16279	14.0	28	-F	3	C	1516	70	.8		
RAMY	11	1517	1519	1526	N14	E26	.445	16279	13.6	9	-N	3	C		23			
KANZ	11	1517	1517	1526	N10	E27	.451	16279	13.7	9	-B	2						
BIGB	11	1517	1518	1527	N11	E27	.453	16279	13.7	10	-B	3	C	1518	20	.2		
654 BIGB	11	1538	1539	1547	N12	E26	.439	16279	13.6	9	-B	3	C	1539	20	.2		ZX
GRP77655	11	1555+1	1557+3	1608	S22	W66	.945	16267	6.7	13	-B				70			
BIGB	11	1555	1557	1608	S22	W67	.950	16267	6.6	13	-B	3	C	1557	80			
HOLL	11	1555	1600	1606	S18	W66	.939	16267	6.7	11	-N	3	C		50			
RAMY	11	1556	1557	1608	S22	W64	.934	16267	6.9	12	-B	3	C		83			
GRP77656	11	1635+1	1636+0	1640	N13	E27	.457	16279	13.7	5	-F				50	.6		
BIGB	11	1635	1636	1640	N12	E30	.499	16279	13.9	5	-N	3	C	1636	60	.7		
RAMY	11	1636	1636	1639	N14	E25	.430	16279	13.6	3	-F	3	C		38			
GRP77657	11	1638+4	1640+3 1711	1717	N15	W10	.216	16275	10.9	39	-B				160	1.6		
BIGB	11	1638	1640	1723	N16	W10	.227	16275	10.9	45	-B	3	C	1640	150	1.6		
RAMY	11	1638	1642	1714	N14	W10	.207	16275	10.9	36	-B	3	C		168			
HOLL	11	1642	1643	1717D	N16	W09	.215	16275	11.0	350	-B	3	C		168		FDE	
PALE	11	1707	1711	1717	N15	W11	.230	16275	10.9	10	-F	3	C		53		F	
658 PALE	11	1706	1709	1718	N09	E28	.466	16279	13.8	12	-F	3	C		30		F	ZX
659 BIGB	11	1707	1717	1758	S15	W30	.604	16274	9.5	51	-N	3	C	1717	70	.8	G	ZX
660 BIGB	11	1723	1724	1729	N20	E80	.979	16288	17.7	6	-N	3	C	1724	20			ZX
GRP77661	11	1742+7	1750+2	1816	N13	W18	.319	16275	10.4	34	-N				90	1.0	F	
PALE	11	1742	1750	1816	N13	W18	.319	16275	10.4	34	-N	3	C		123		F	
RAMY	11	1743	1750	1816	N13	W19	.335	16275	10.3	33	-N	3	C		57			
BIGB	11	1749	1752	1831	N10	W18	.309	16275	10.4	42	-B	3	P	1752	80	.9		
GRP77662	11	1758+3	1801+0	1819	N08	E29	.481	16279	13.9	21	-N				50	.6	F	
BIGB	11	1758	1801	1828	N08	E30	.496	16279	14.0	30	-N	2	P	1801	40	.5		
RAMY	11	1759	1801	1819	N09	E29	.481	16279	13.9	20	-N	3	C		48			
HOLL	11	1800	1801	1819	N08	E29	.481	16279	13.9	19	-N	3	C		57			
PALE	11	1801	1801	1807	N09	E28	.466	16279	13.9	6	-F	3	C		37		F	
GRP77663	11	1840+0	1840+1	1855	N09	E28	.466	16279	13.9	15	-F				25	.3	F	
RAMY	11	1840	1840	1851	N09	E29	.481	16279	14.0	11	-N	3	C		26			
PALE	11	1840	1841	1859	N09	E27	.451	16279	13.8	19	-F	3	C		20		F	
GRP77664	11	1943+1	1952+0	2006	N09	E28	.466	16279	13.9	23	-N				60	.7	F	
RAMY	11	1943	1952	2005	N09	E28	.466	16279	13.9	22	-N	3	C		59			
HOLL	11	1944	1952	2007	N09	E29	.481	16279	14.0	23	-N	3	C		55		F	
GRP77665	11	2113+6	2121+1	2148D	N07	E28	.466	16279	14.0	35	-F				80	.9	F	
CULG	11	2113	2121	2148U	N07	E28	.466	16279	14.0	35D	-F		C	2121	100	1.1	F	
BIGB	11	2119	2122	2148D	N07	E29	.481	16279	14.1	29D	-N	2	P	2122	60	.7		
	11	2211	2221	NO FLARE PATROL														
666 CULG	11	2223E	2223	2228U	N11	E28	.468	16279	14.0	5D	-N		P	2223	80	.9	T	ZX
667 CULG	11	2223U	2224	2244	N14	W79	.977	16269	6.0	21D	-F		P	2224	10			ZX
GRP77668	11	2249+2	2252+5	2337D	N12	W18	.315	16275	10.6	48	-N				60	.6	FI	
CULG	11	2249	2256U	2323U	N12	W18	.315	16275	10.6	34D	-N		P	2256	140	1.4	FI	
BIGB	11	2251	2252	2337D	N10	W20	.341	16275	10.5	46D	-N	2	P	2252	50	.6		
HOLL	11	2251	2252	2324	N12	W22	.378	16275	10.3	33	-N	3	C		69			
HOLL	11	2255	2257	2315D	N16	W14	.280	16275	10.9	20D	-F	3	C		40			
HOLL	11	2328	2331	2331D	N16	W15	.294	16275	10.9	3D	-F	2	C		40			
669 CULG	11	2252	2253	2307	S06	W01	.230	16277	11.9	15	-F		C	2253	20	.2	G	ZX
GRP77670	11	2335E	2340+3	2352	N10	E23	.389	16279	13.7	17	-N				40	.4		
CULG	11	2335E	2343	2356	N10	E23	.389	16279	13.7	21D	-N		P	2343	40	.4	CT	
BIGB	11	2337E	2340	2348	N11	E23	.391	16279	13.7	11D	-B	2	P	2340	40	.4		

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq Deg.	
671 HOLL	11	2346E	2423	0029D	N10	W23	.389	16275	10.3	43D	-N	2	C		97		ZX
GRP77672	12	0012+0	0013+0	0025	N09	E28	.466	16279	14.1	13	-N				25	.3	F
HOLL	12	0012	0013	0021	N10	E27	.451	16279	14.0	9	-N	2	C		34		F
BIGB	12	0012	0013	0028	N09	E29	.481	16279	14.2	16	-N	2	C	0013	20	.2	
GRP77673	12	0054+2	0055+4 0112	0134	N10	W23	.389	16275	10.3	40	1N						
BIGB	12	0054	0055	0059D	N09	W23	.388	16275	10.3	5D	-N	2	P	0055	60	.6	
MITK	12	0056	0059	0116	N09	W22	.372	16275	10.4	20	1N		C	0059	250	2.8	E
MANI	12	0101E	0101U	0150	N10	W23	.389	16275	10.3	49D	-N	3	C		100		F
PURP	12	0110	0112	0209	N14	W16	.294	16275	10.8	59	1N		P				
YUNN	12	0111E	0116	0118D	N10	W23	.389	16275	10.3	7D	1N		P		353	3.9	
674 TACH	12	0433	0438	0447	N15	W16	.301	16275	11.0	14	?N		C	0438	354	3.8	E ZX
	IMP.1 NO 8 PURP																
675 ABST	12	0500	0508	0515	N11	W2E	.437	16275	10.3	15	-F		C	0508	131	1.4	DJ ZX
676 ISTA	12	0737	0739	0743	N10	W28	.467	16275	10.2	6	-F		V				D ZX
GRP77677	12	1015+2	1020+0	1027	N14	E16	.294	16279	13.6	12	-F						E
KANZ	12	1015	1020	1027	N14	E16	.294	16279	13.6	12	-F	3					
MONT	12	1017	1020	1026	N15	E17	.315	16279	13.7	9	-F		C	1020	60		E
GRP77678	12	1228+0	1231 1241	1332	S22	W68	.955	16267	7.4	64	-N						
KANZ	12	1228	1241	1328	S21	W69	.958	16267	7.3	60	-N	1					
RAMY	12	1228	1231	1336	S23	W67	.952	16267	7.5	68	-N	3	C				
679 TELV	12	1232	1236U	1242	N09	W31	.511	16275	10.2	10	-N	3			27	.3	ZX
680 TELV	12	1255	1257U	1312D	N16	E23	.409	16279	14.3	17D	-N	3			40	.4	ZX
GRP77681	12	1538+2	1540+2	1550	S33	W60	.938	16267	8.2	12	-F				25		
BIGB	12	1538	1540	1553	S31	W60	.933	16267	8.2	15	-N	2	C	1540	30	.6	
RAMY	12	1540	1542	1547	S35	W60	.943	16267	8.2	7	-F	3	C		22		
GRP77682	12	1641+1	1642+1	1659	S31	W60	.933	16267	8.2	18	-N				20		
BIGB	12	1641	1643	1659	S31	W60	.933	16267	8.2	18	-B	2	C	1643	20	.4	
HOLL	12	1641	1642	1657	S31	W60	.933	16267	8.2	16	-N	3	C		27		
RAMY	12	1642	1642	1724	S35	W61	.947	16267	8.1	42	-F	3	C		23		
GRP77683	12	1704	1715	1723	S31	W60	.933	16267	8.2	19	-F						
HOLL	12	1643	1724	1810	N12	W33	.543	16267	10.2	87	-N	3	C		133		U F
HOLL	12	1652	1705	1721	N16	W24	.424	16267	10.9	29	-F	3	C		34		
PALE	12	1713	1726	1750	N11	W28	.468	16267	10.6	37	-F	3	C		84		F
RAMY	12	1716	1724	1735D	N11	W30	.498	16267	10.5	19D	-F	3	C		54		
BIGB	12	1717	1723	1803	N11	W30	.498	16267	10.5	46	-N	2	P	1723	80	1.0	
684 HOLL	12	1704	1719	1723	S31	W60	.933	16275	8.2	19	-F	3	C		11		ZX
GRP77685	12	1838>9	1839 1855	1904	S33	W61	.942	16267	8.2	26	-F						F
PALE	12	1838	1839	1859	S35	W62	.951	16267	8.1	21	-F	3	C		11		F
HOLL	12	1854	1855	1909	S31	W61	.938	16267	8.2	15	-F	3	C		12		
686 HOLL	12	1905	1907	1914	N16	W25	.438	16275	10.9	9	-F	3	C		26		ZX
687 HOLL	12	1917	1920	1929	N12	W34	.557	16275	10.3	12	-N	3	C		43		ZX
688 HOLL	12	1926	1928	1932	N09	E1E	.275	16279	14.0	6	-F	3	C		40		ZX
	12	1942	1948	NO FLARE PATROL													
689 HOLL	12	2142	2143	2157	N16	W28	.481	16275	10.8	15	-F	3	C		38		ZX
GRP77690	12	2221	2237+1	2258	N17	W27	.471	16275	10.9	37	-N				60	.7	
HOLL	12	2221	2237	2252	N16	W27	.467	16275	10.9	31	-N	3	C		45		
CULG	12	2237E	2238U	2303U	N18	W28	.490	16275	10.8	26D	-N		P	2238	70	.8	
GRP77691	12	2252+5	2257+4	2314	S17	W71	.962	16267	7.6	22	-F						
CULG	12	2252	2301	2319	S15	W71	.960	16267	7.6	27	-F		C	2301	10		
HOLL	12	2257	2257	2308	S19	W71	.964	16267	7.6	11	-F	3	C				

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq Deg.		
GRP77692	12	2308+3	2314+7	2339	N08	E13	.223	16279	13.9	31	-N				70	.7		
CULG	12	2308U	2321	2352U	N08	E13	.223	16279	13.9	44D	-N		C	2321	180	1.8		
HOLL	12	2311	2314	2334	N08	E13	.223	16279	13.9	23	-N	3	C		73			
BIGB	12	2317E	2317	2339	N07	E14	.240	16279	14.0	22D	-N	2	P	2317	60	.6		
693 CULG	13	0103	010E	0119	N07	E07	.121	16279	13.6	16	-F		C	010E	40	.4	H	ZX
694 CULG	13	0243	0248	0313	N18	W29	.503	16275	10.9	30	-F		C	0248	90	1.0	T	ZX
695 CULG	13	0244	0249	0317	S25	E44	.805	16285	16.4	33	-N		C	0249	100	1.7		ZX
696 CULG	13	0407U	0413	0429	N07	E05	.087	16279	13.5	22D	-N		C	0413	60	.6	H	ZX
GRP77697	13	0623+1	0630+1	0637	S26	E41	.786	16285	16.3	14	-N							
HTPR	13	0623	0630	0632	S25	E41	.780	16285	16.3	9	-F		C	0630	40	.5		
KANZ	13	0624	0631	0639	S26	E43	.802	16285	16.5	15	-N	2						
YUNN	13	0630E	0630	0637	S27	E40	.785	16285	16.3	7D	1N		P		265	4.2		
GRP77698	13	0629+6	0640+1 0655	0717	S30	W69	.970	16267	8.1	48	-N				60		DG	
CULG	13	0629	0641	0709D	S30	W69	.970	16267	8.1	40D	-N		C	0641	40		T	
YUNN	13	0630	0640	0645	S28	W75	.986	16267	7.6	15	1N		C		80			
KANZ	13	0635	0655	0734	S31	W70	.974	16267	8.0	59	-N	1						
ISTA	13	0635E		0725	S31	W67	.964	16267	8.2	50D	1N		V				BDG	
699 ISTA	13	0637		0653	N16	W32	.537	16275	10.9	16	-N		V				E	ZX
700 ISTA	13	0657		0710	N16	E07	.193	16279	13.8	13	-F		V				D	ZX
701 ISTA	13	0726		0740	S25	E42	.789	16285	16.5	14	-F		V				D	ZX
GRP77702	13	0753>9	0758 0804+2	0819	N07	E0E	.104	16279	13.8	2E	-N				80	.8	E	
TELV	13	0753U	0758U	0818D	N08	E05	.087	16279	13.7	25D	-N	1			27	.3	F	
ISTA	13	0756	0805	0820	N07	E07	.121	16279	13.9	24	1B		V				F	
KANZ	13	0758	0806	0821	N08	E07	.122	16279	13.9	23	1N	3						
HTPR	13	0802	0805	0816	N07	E06	.104	16279	13.8	14	-N		C	0805	60	.6	E	
MONT	13	0802	0805	0820	N08	E0E	.104	16279	13.8	18	-N		C	0805	110		E	
TELV	13	0802	0804	0821	N07	E03	.052	16279	13.6	19	-N	2			49	.5	F	
YUNN	13	0804	0805	0815	N07	E07	.121	16279	13.9	11	1N		P		241	2.4	BE	
703 KANZ	13	0817	0821	0833	S29	W70	.972	16267	8.1	16	-F	2						ZX
GRP77704	13	0841+2	0843 0854+0	0900	N09	E07	.125	16279	13.9	19	-N						F	
KANZ	13	0841	0854	0901	N09	E07	.125	16279	13.9	20	-N	2					F	
TELV	13	0841	0843U	0853D	N08	E03	.054	16279	13.6	12D	-N	3			24	.3	F	
MONT	13	0843	0854	0858	N09	E08	.141	16279	14.0	15	-F		C	0854	50		E	
GRP77705	13	0849+3	0853+1	0900	S25	E40	.772	16285	16.4	11	-F							
KANZ	13	0849	0854	0901	S25	E41	.780	16285	16.4	12	-F	3						
HTPR	13	0852	0853	0859	S25	E40	.772	16285	16.4	7	-F		C	0853	20	.3		
706 HTPR	13	0954	1000	1008	N06	E06	.106	16279	13.9	14	-F		C	1000	30	.3	E	ZX
707 RAMY	13	1305	1306	1310	N26	E30	.562	16282	15.8	5	-F	3	C		24			ZX
GRP77708	13	1307+3	1312+4	1340	N07	E03	.052	16279	13.8	33	-B				130	1.3	E	
RAMY	13	1307	1313	1343	N07	E02	.035	16279	13.7	36	-B	3	C		146		FDE	
KANZ	13	1307	1316	1349	N08	E05	.087	16279	13.9	42	1B	3					F	
HTPR	13	1309	1312	1335	N07	E05	.087	16279	13.9	26	-B		C	1312	100	1.0	E	
BERN	13	1309	1314	1347	N08	E02	.037	16279	13.7	38	1B		C		175			
LVOV	13	1310	1315	1333	N07	W01	.018	16279	13.5	23	-N		C	1315	100	1.0	E	
HUAN	13	1322E		1329	N07	E03	.052	16279	13.8	7D	-N	1	P	1322	45	.5	E	
GRP77709	13	1452+3	1455+2	1512	N08	E06	.104	16279	14.1	20	-N				35	.4	E	
HTPR	13	1452		1459D	N06	E0E	.106	16279	14.1	7D	-F		C	1454	40	.4	E	
BIGB	13	1454	1455	1512	N08	E06	.104	16279	14.1	18	-B	2	C	1455	30	.3		
KANZ	13	1455	1457	1507D	N08	E0E	.104	16279	14.1	12D	-B	3						
710 BIGB	13	1547	1548	1552	S31	W77	.992	16267	7.9	5	-N	2	C	1548	30			ZX
711 RAMY	13	1605	1605	1609	N29	E29	.573	16282	15.8	4	-F	3	C		20			ZX
	13	1820	1825	NO FLARE PATROL														
712 HUAN	13	1825		1832	S25	E75	.984		19.4	7	-F	1	C				D	ZX

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
	13	1836	1839	NO FLARE PATROL														
713 HOLL	13	1853	1855	1913	S31	W73	.983	16267	8.3	20	-F	3	C					ZX
	13	1858	1904	NO FLARE PATROL														
714 HOLL	13	1904E	1904U	1944	N07	W01	.018	16279	13.7	40D	-N	3	C		49		F	ZX
	13	1916	1919	NO FLARE PATROL														
715 HOLL	13	1919	1927	1933	S32	W78	.994	16267	8.0	14	-F	3	C					ZX
716 HOLL	13	1949	1955	2004	N08	E00	.013	16279	13.8	15	-N	3	C		35		F	ZX
	13	1955	2000	NO FLARE PATROL														
717 HOLL	13	2009	2010	2016	N08	W02	.037	16279	13.7	7	-N	3	C		57		F	ZX
GRP77718	13	2027+8	2029	2050	N08	E02	.037	16279	14.0	23	-N				60	.6	E	
HUAN	13	2027		2041D	N08	E03	.054	16279	14.1	14D	-N	1	P	2028	40	.4	E	
HOLL	13	2027	2029	2050	N09	E01	.035	16279	13.9	23	-N	3	C		77			
	13	2041	2057	NO FLARE PATROL														
GRP77719	13	2057+1	2139+6 2217	2257	N07	W02	.035	16279	13.7	120	-N						FIK	
CULG	13	2057E	2145	2241U	N07	W03	.052	16279	13.6	104D	1N		C	2145	300	3.0	FIK	
HOLL	13	2058	2139	2213	N08	W03	.054	16279	13.6	75	-N	3	C		105		F	
HOLL	13	2214	2217	2257	N08	E01	.022	16279	14.0	43	-N	3	C		52			
720 CULG	13	2110	2115	2121	S28	E33	.737	16285	16.4	11	-F		C	2115	30	.5		ZX
721 CULG	13	2120	2124	2128	N31	E69	.929	16291	19.1	8	-F		C	2124	60			ZX
722 CULG	13	2126	2127	2130	N29	E31	.594	16282	16.2	4	-F		C	2127	30	.4		ZX
723 CULG	13	2204	2214	2238	S20	E88	1.000		20.5	34	1F		C	2214	100			ZX
	13	2215	2224	NO FLARE PATROL														
724 CULG	13	2240	2247	2259	S25	W68	.959	16281	8.8	19	-N		C	2247	50		T	ZX
GRP77725	13	2310>9	2337+2	2349	S25	W66	.950	16281	9.0	39	-N				60		DK	
CULG	13	2310	2337	2352	S25	W65	.945	16281	9.1	42	-N		C	2337	80		KT	
VORO	13	2337	2339	2346	S26	W68	.960	16281	8.9	9	-N		C	2339	54		D	
726 CULG	13	2316	2319	2322	S15	W60	.895	16274	9.5	6	-F		C	2319	60	1.3	S	ZX
727 CULG	13	2332	2338	0003	N35	E60	.878		18.5	31	?F		C	2338	120	2.5	HG	ZX
	IMP.1 NO : VORO																	
GRP77728	14	0040+1	0048 0121+6	0150	N07	W03	.052	16279	13.8	70	1N				210	2.1	JKH	
CULG	14	0040	0048	0059	N08	W01	.022	16279	14.0	19	-F		C	0048	80	.8		
VORO	14	0041	0127	0146	N06	W06	.106	16279	13.6	65	1N	*	C	0127	251	2.5	EJ	
YUNN	14	0057E	0058	0104D	N07	W04	.069	16279	13.7	7D	1N		P		257	2.6		
CULG	14	0105	0125	0257U	N08	W05	.087	16279	13.7	112D	1N	*	C	0125	250	2.5	FKHT	
PALE	14	0117	0121	0150D	N08	W03	.054	16279	13.8	33D	-N	*	C		133		DE	
729 YUNN	14	0057E	0058	0104D	S26	W70	.968	16281	8.8	7D	?N		P		80			ZX
	IMP.1 NO : CULG VORO																	
730 CULG	14	0122U	0137	0144	S27	E31	.714	16285	16.4	22D	-F		C	0137	30	.4	JT	ZX
GRP77731	14	0245>9	0325+5	0401	N06	W05	.089	16279	13.7	76	2N				570	5.7	IJ	
YUNN	14	0245	0325	0347	N07	W05	.087	16279	13.7	62	2N	*	C		514	5.2		
CULG	14	0317	0330	0414	N06	W05	.089	16279	13.8	57	2N	*	C	0330	640	6.4	TJI	
732 CULG	14	0308	0315	0325	N32	E66	.913	16291	19.1	17	-N		C	0315	40	1.0		ZX
733 CULG	14	0328	0355	0557U	S14	W63	.914	16274	9.4	149D	-F		C	0355	80	1.8		ZX
734 CULG	14	0442	0458	0522	N17	W45	.707	16275	10.8	40	-N		C	0458	60	.8		ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.	
GRP77735	14	0607	0612	0645	N06	W07	.123	16279	13.7	38	-N				130	1.3	EJU
			0619+1														
CULG	14	0607	0612	0648U	N06	W06	.106	16279	13.8	41D	1N		C	0612	380	3.8	
ABST	14	0610E	0619	0645	N07	W06	.104	16279	13.8	35D	-N		P	0619	131	1.3	EJ
ATHN	14	0616E	0620U	0640	N06	W06	.106	16279	13.8	24D	-B	2	C		127		DE
ISTA	14	0620E		0642	N08	W08	.139	16279	13.7	22D	1F		V				BU
HTPR	14	0628E		0705	N06	W08	.140	16279	13.7	37D	-N		C	0643	180	1.8	BET
GRP77736	14	0735+4	0740+2	0758	S28	W82	.998	16267	8.2	23	1N				160		
ATHN	14	0735	0742	0758	S28	W74	.954	16267	8.8	23	1B	3	C		159		DE
YUNN	14	0736	0740	0759	S26	W82	.998	16267	8.2	23	2N		C		209		
MONT	14	0739	0741	0746	S29	W90	1.000	16267	7.6	7	-F		C	0741	70		
GRP77737	14	0743+3	0745+3	0759	N08	W04	.070	16279	14.0	16	-N				90	.9	EU
			0754														
HTPR	14	0731	0745	0759	N06	W08	.140	16279	13.7	28	-N	*	C	0745	120	1.2	E
MONT	14	0743	0754	0759	N08	W03	.054	16279	14.1	16	-F	*	C	0754	50		
ISTA	14	0745		0756	N08	W06	.104	16279	13.9	11	1F	*	V				U
ATHN	14	0746	0748	0813	N10	W01	.051	16279	14.2	27	-B	*	C		64		DE
GRP77738	14	0755+5	0801+7	0901	N07	W08	.138	16279	13.7	66	1B				400	4.1	JKUN
			0819+8														
YUNN	14	0743	0816	0830	N07	W07	.121	16279	13.8	47	2B	*	C		611	6.2	U
ABST	14	0744	0812	0844	N06	W07	.123	16279	13.8	60	1B	*	C	0812	262	2.7	FJ
CATA	14	0755	0802	0824D	N07	W07	.121	16279	13.8	29D	1B	*	P	0802	449	4.6	
BUCA	14	0755	0806	0915	N07	W08	.138	16279	13.7	80	2B	*	C	0806	644	6.7	
MONT	14	0759	0808	0906	N08	W06	.104	16279	13.9	67	1N	*	C	0808	330		
TELV	14	0759	0800	0800D	N09	W09	.158	16279	13.7	1D	-N	*			163	1.7	W
TELV	14	0759	0802	0915U	N09	W05	.092	16279	14.0	76D	-N	*			122	1.2	F
HTPR	14	0800	0801	0915	N07	W10	.172	16279	13.6	75	1B	*	C	0801	320	3.2	EU
ISTA	14	0800		0840	N08	W08	.139	16279	13.7	40	1N	*	V				KU
ATHN	14	0802	0808	0905	N06	W07	.123	16279	13.8	63	1B	*	C		111		DE
BERN	14	0808E	0808	0935	N08	W09	.156	16279	13.7	87D	2B	*	C		720		
TELV	14	0816	0819	0837U	N04	W14	.247	16279	13.3	21D	-N	*			27	.3	W
HTPR	14	0817	0823	0845	N02	W13	.241	16279	13.4	28	-N	*	C	0823	80	.8	E
CATA	14	0824E	0827	0845	N03	W13	.235	16279	13.4	21D	-N	*	P	0827	112	1.1	
YUNN	14	0831	0836	0845	N08	W07	.122	16279	13.8	14	2N	*	C		514	5.2	
KHAR	14	0850E		0855D	N06	W10	.174	16279	13.6	5D	1N	*	P				E
GRP77739	14	0808+2	0815+5	0855	N06	E90	1.000		21.1	47	1N						AY
			0835														
YUNN	14	0808	0820	0845	N06	E84	.993		20.6	37	3N	*	C		307		Y
HTPR	14	0809	0815	0915	N05	E90	1.000		21.1	66	1N		C	0815	120		
MONT	14	0810	0815	0828	N07	E90	1.000		21.1	18	-N	*	C	0815	80		
CATA	14	0824E	0835	0905D	N07	E90	1.000		21.1	41D	2F	*	P	0835	281		A
GRP77740	14	0829+3	0832+4	0846	S10	W32	.591	16277	12.0	17	-N						G
YUNN	14	0829	0832	0845	S05	W33	.575	16277	11.9	16	1N		C		193	2.3	G
MONT	14	0832	0836	0846	S15	W31	.615	16277	12.0	14	-F		C	0836	50		
GRP77741	14	1117+3	1120+0	1125	S21	E19	.557	16285	15.9	8	-F				45	.5	
HTPR	14	1117	1120	1125	S22	E20	.576	16285	16.0	8	-F		C	1120	30	.3	
CATA	14	1120	1120	1125	S21	E19	.557	16285	15.9	5	-F	2	C	1120	56	.6	
GRP77742	14	1307+1	1307+0	1311	N08	W08	.139	16279	13.9	4	-N				50	.5	E
HUAN	14	1307		1308D	N08	W08	.139	16279	13.9	1D	-N	1	P	1307	30	.3	E
HTPR	14	1307	1307	1311	N08	W10	.173	16279	13.8	4	-B		C	1307	60	.6	E
RAMY	14	1307	1307	1311	N09	W08	.141	16279	13.9	4	-N	3	C		51		
TELV	14	1308	1311	1325D	N08	E01	.022	16279	14.6	17D	-N	3			81	.8	F
GRP77743	14	1417+4	1422+3	1437	N07	W11	.189	16279	13.8	20	-N				30	.3	
HTPR	14	1417	1422	1437	N07	W13	.223	16279	13.6	20	-F		C	1422	30	.3	E
RAMY	14	1419	1423	1453	N07	W11	.189	16279	13.8	34	-N	3	C		44		
HUAN	14	1420		1433D	N07	W12	.206	16279	13.7	13D	-N	1	P	1422	20	.2	D
HOLL	14	1420	1422	1434	N07	W11	.189	16279	13.8	14	-N	3	C		39		F
BIGB	14	1421	1425	1436	N07	W11	.189	16279	13.8	15	-N	2	C	1425	40	.4	
GRP77744	14	1445+7	1449	1500	S27	W88	1.000	16267	8.0	15	-F						
			1456														
BIGB	14	1445	1449	1459	S26	W90	1.002	16267	7.9	14	-N	2	C	1449	30		
RAMY	14	1452	1456	1500	S28	W86	1.000	16267	8.2	8	-F	3	C				
GRP77745	14	1520+1	1528	1618	S05	W36	.615	16277	11.9	58	-F						E
RAMY	14	1520	1528	1618	S06	W35	.607	16277	12.0	58	-N	3	C		47		
HTPR	14	1521		1541D	S05	W37	.628	16277	11.9	20D	-F		C	1537	30	.4	E

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.		
GRP77746	14	1700+1	1703>9	1729	N15	W52	.783	16275	10.8	29	1N							
BIGB	14	1700	1703	1803	N15	W55	.813	16275	10.6	63	1B	1	C	1703	280	5.0		
HUAN	14	1701	1704	1716	N15	W52	.783	16275	10.8	15	-N	1	C	1704	40	.6	E	
RAMY	14	1701	1708	1710D	N16	W52	.783	16275	10.8	9D	2N	3	C		390			
PALE	14	1710E	1713U	1729	N15	W53	.793	16275	10.7	19D	-F	3	C		58		FDE	
747 RAMY	14	1727	1727	1734	N05	W11	.194	16279	13.9	7	-N	3	C		27			ZX
GRP77748	14	1932	1939	1959D	N07	W14	.240	16279	13.8	27	-N						E	
HUAN	14	1932	1939	1959	N07	W14	.240	16279	13.8	27	-N	1	C	1939	90	.9	E	
BIGB	14	1948E	1948	2055	N07	W15	.257	16279	13.7	67D	-B	1	P	1948	100	1.1		
GRP77749	14	2115>9	2134+1	2218	N07	W15	.257	16279	13.8	63	-N				100	1.0	FK	
CULG	14	2115	2135	2227D	N08	W15	.257	16279	13.8	72D	-N		C	2135	140	1.5	KF	
BIGB	14	2130	2134	2209	N07	W15	.257	16279	13.8	39	-B	1	C	2134	70	.7		
750 CULG	14	2131	2148	2158	N28	E17	.443	16282	16.2	27	-F		C	2148	40	.4		ZX
751 CULG	14	2159	2212	2227D	S05	W39	.653	16277	12.8	28D	-N		C	2212	140	1.8		ZX
752 CULG	14	2159	2214	2227D	N15	W14	.272	16279	13.9	28D	-N		C	2214	90	.9		ZX
753 CULG	14	2239	2255	2316	S05	W40	.666	16277	11.9	37	-F		C	2255	40	.5		ZX
GRP77754	14	2248+2	2302+4	2348	N07	W17	.290	16279	13.7	68	1F				260	2.7	EHJK	
CULG	14	2248	2302	2351	N08	W16	.274	16279	13.7	71	1N		C	2302	220	2.3		
VORO	14	2242	2306	2345	N07	W18	.307	16279	13.6	63	1F		C	2306	296	3.1	EHJK	
755 CULG	14	2245	2248	2253	S13	E29	.576	16293	17.1	8	-N		C	2248	20	.2		ZX
GRP77756	14	2258+6	2304+1	2317	N14	W14	.264	16279	13.9	19	-N						EHL	
CULG	14	2258	2304	2317	N15	W14	.272	16279	13.9	19	-N		C	2304	90	.9		
BIGB	14	2259	2304	2348	N07	W15	.257	16279	13.8	49	-N	2	P	2304	50	.5		
VORO	14	2304	2305	2309	N14	W14	.264	16279	13.9	5	-N		C	2305	152	1.6	EHL	
757 CULG	14	2345	2415	0119	N23	W44	.708	16275	11.7	94	?F		C	2415	260	3.6	F	ZX
	IMP.1 NO 1 BIGB VORO																	
758 CULG	15	0044	0047	0052	S12	E70	.952	16295	20.3	8	-F		C	0047	40			ZX
759 CULG	15	0046	0055	0130	N09	W13	.225	16279	14.1	44	-F		C	0055	20	.2		ZX
760 CULG	15	0151	0158	0209	N19	E37	.613	16288	17.9	18	-F		C	0158	40	.5		ZX
761 CULG	15	0228	0235	0251D	N13	E70	.933	16296	20.4	23D	-F		P	0235	50			ZX
762 CULG	15	0246	0304U	0350	S13	E64	.918	16295	19.9	64	?N		P	0304	260	6.0	F	ZX
	IMP.2 NO 1 PALE																	
GRP77763	15	0320	0407	0510	N14	W62	.876	16275	10.5	110	1N						I	
CULG	15	0320	0407	0510	N14	W64	.892	16275	10.3	110	1N		C	0407	250	5.0	FI	
PALE	15	0357E	0401U	0401D	N15	W61	.868	16275	10.6	4D	-F	3	C		24		DE	
	15	0323	0330	NO FLARE PATROL														
GRP77764	15	0534+2	0545+2	0605	N30	E50	.789	16291	19.0	31	-F				70	1.2	DJ	
CULG	15	0534	0545	0549D	N32	E50	.794	16291	19.0	15D	-N		P	0545	60	1.0		
ABST	15	0536	0547	0605	N29	E50	.786	16291	19.0	29	-F		C	0547	87	1.5	DJ	
765 ABST	15	0542	0543	0555	N17	W25	.443	16279	13.4	13	-N		C	0543	87	.9	DJ	ZX
GRP77766	15	0616+5	0623+0	0646	N11	W65	.900	16275	10.4	30	1N				90	2.1	DJ	
CULG	15	0616	0623	0656	N09	W65	.901	16275	10.4	40	-N	*	C	0623	90			
ABST	15	0621	0623	0635	N14	W66	.907	16275	10.3	14	1N	*	C	0623	87		DJ	
767 CULG	15	0617	0622	0629	N32	E50	.794	16291	19.0	12	-F		C	0622	50	.8		ZX
768 CULG	15	0633	0704	0720D	S12	E33	.616	16293	17.7	47D	-F		P	0704	80	1.0	LK	ZX
GRP77769	15	0722+1	0725+7	0805	N08	W21	.356	16279	13.7	43	-N						J	
CULG	15	0648	0732U	0732D	N08	W21	.356	16279	13.7	44D	1N		P	0732	360	3.6	F	
ABST	15	0722	0725	0740D	N10	W15	.260	16279	14.2	18D	-N		P	0725	87	.9	DJ	
HTPR	15	0723	0730	0805	N08	W23	.388	16279	13.6	42	-F		C	0730	20	.2	E	
770 ABST	15	0730	0733	0740D	N17	W23	.415	16279	13.6	10D	-N		P	0733	174	1.9	EJ	ZX
771 HTPR	15	0826	0830	0844	N06	W20	.340	16279	13.9	18	-F		C	0830	20	.2	E	ZX

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	OBSERVATORY	OBSERVED UT DATE	OBSERVED UT START	OBSERVED UT MAX. PHASE	OBSERVED UT END	LOCATION APPROX LAT.	LOCATION APPROX WEB. DIST.	LOCATION CENTRAL DISTANCE	LOCATION McMATH PLAGE REGION	LOCATION CMP. DAY	DURATION MIN.	IMPORTANCE	OBS. CONF.	OBS. TYPE	MEASUREMENTS TIME UT	MEASUREMENTS MEAS. AREA Millionths of Disk	MEASUREMENTS CORR. AREA Sq. Deg.	REMARKS	
772	HTPR	15	0859	0902	0915	N05	W21	.358	16279	13.8	16	-F		C	0902	30	.3	E	ZX
773	HTPR	15	0934	0936	0946	N20	E34	.578	16288	17.9	12	-F		C	0936	20	.2	E	ZX
GRP77774		15	1013>9	1026+3 1035	1110	S14	E56	.861	16295	19.6	57	2B				320	6.1	EU	
	HTPR	15	1018	1028	1040	N09	E90	1.000	16295	22.2	30	3B	*	C	1028	450			
	YUNN	15	1021	1027	1027D	N06	E84	.993	16295	21.7	6D	3B	*	P		611		AY	
	MONT	15	1024	1028	1038D	N06	E90	1.000	16295	22.2	14D	1B	*	C	1028	330			
GRP77775		15	1021+3	1028+0	1040	N06	E90	1.000	16298	22.2	19	2B				460		AY	
	HTPR	15	1013	1028	1125	S14	E60	.893	16298	19.9	72	2B		C	1028	400	8.0	EU	
	YUNN	15	1017	1027	1027D	S15	E57	.872	16298	19.7	10D	2B		P		530	11.0	U	
	MONT	15	1019	1029	1038D	S15	E56	.864	16298	19.6	19D	1N		C	1029	250			
	ATHN	15	1024	1028	1100	S13	E55	.850	16298	19.6	36	1B	1		1028	196	3.9		
	CATA	15	1030	1035	1110	S14	E56	.861	16298	19.6	40	2B	1	C	1035	393	7.9		
776	HTPR	15	1137		1151D	N14	W69	.927	16275	10.3	14D	-F		C	1140	20	.5	E	ZX
		15	1151	1157	NO FLARE PATROL														
		15	1201	1206	NO FLARE PATROL														
777	KANZ	15	1346	1346	1354	N32	E46	.759	16291	19.0	8	-F	1						ZX
778	BIGB	15	1535	1538	1548	S15	E45	.764	16295	19.0	13	-F	3	C	1538	40	.6	G	ZX
779	BIGB	15	1600	1603	1610	N09	W73	.952	16275	10.2	10	-F	3	C	1603	30		G	ZX
GRP77780		15	1611+5	1619+0	1647	N06	W24	.405	16279	13.9	36	-F				30	.3	E	
	HTPR	15	1611	1619	1654D	N07	W23	.388	16279	13.9	43D	-F		C	1619	30	.3	E	
	BIGB	15	1616	1619	1640	N06	W25	.420	16279	13.8	24	-N	3	C	1619	30	.4		
781	BIGB	15	1830	1838	1845	N08	E90	1.000	16298	22.5	15	-N	3	C	1838	30			ZX
782	BIGB	15	1840	1841	1852	S16	E41	.728	16295	18.9	12	-N	3	C	1841	30	.4	G	ZX
783	BIGB	15	1844	1846	1854	S13	E27	.553	16293	17.8	10	-N	3	C	1846	40	.5	G	ZX
784	CULG	15	2059	2101	2105	N05	W30	.499	16279	13.6	6	-F		C	2102	60	.6		ZX
785	CULG	15	2145	2150	2153D	N07	W28	.466	16279	13.8	8D	-N		P	2150	20	.2		ZX
786	BIGB	15	2219	2222	2230	S00	E90	1.000	16298	22.7	11	-B	3	C	2222	50			ZX
787	CULG	15	2241	2247	2308	N13	W75	.960	16275	10.3	27	-F		C	2247	80			ZX
788	CULG	15	2324	2327	2331	S14	E24	.528	16293	17.8	7	-F		C	2327	30	.4		ZX
789	CULG	15	2329	2342	2352	N08	W77	.971	16275	10.2	23	-F		C	2342	30			ZX
GRP77790		15	2338+3	2341+0	2351	S13	E24	.515	16293	17.8	13	-N				60	.7	E	
	CULG	15	2338	2341	2352	S14	E24	.528	16293	17.8	14	-N		C	2341	50	.6		
	VORO	15	2341	2341	2350	S12	E25	.521	16293	17.9	9	-N		C	2341	72	.8	E	
GRP77791		16	0028+4	0032+3	0044	N07	W30	.496	16279	13.8	16	-N				60	.7	D	
	CULG	16	0028	0032	0046	N08	W30	.496	16279	13.8	18	-N		C	0032	50	.6		
	VORO	16	0032	0035	0041	N07	W30	.496	16279	13.8	9	-N		C	0035	81	.9	D	
GRP77792		16	0101>9	0109+3	0114	N05	E90	1.000	16298	22.8	13	-N						FHK	
	CULG	16	0101	0110	0121D	N04	E90	1.000	16298	22.8	20D	1N		P	0110	180		FK	
	BIGB	16	0108	0109	0114D	N01	E90	1.000	16298	22.8	6D	-N	3	P	0109	110			
	BIGB	16	0110	0111	0113	N07	E90	1.000	16298	22.8	3	-B	3	C	0111	50			
	VORO	16	0111	0112	0114	N07	E90	1.000	16298	22.8	3	-F		C	0112	36		H	
793	VORO	16	0119	0121	0124	N06	E90	1.000	16298	22.8	5	-F		C	0121	45		H	ZX
GRP77794		16	0137	0138+0 0159	0208	N07	W32	.526	16279	13.7	31	-N				90	1.1	FHL	
	VORO	16	0137	0138	0146	N07	W32	.526	16279	13.7	9	-N		C	0138	81	.9	D	
	CULG	16	0138E	0138U	0212	N06	W33	.542	16279	13.6	34D	-N		P	0138	100	1.1	FLT	
	VORO	16	0158	0159	0204	N08	W32	.526	16279	13.7	6	-F		C	0159	72	.8	DH	
795	CULG	16	0155	0201	0230	N14	W75	.960	16275	10.5	35	1F		C	0201	180			ZX
796	CULG	16	0306	0307	0315	N09	W38	.611	16279	13.3	9	-F		C	0307	30	.4	LT	ZX
797	CULG	16	0333	0359	0417	S20	E35	.693	16295	18.8	44	1F		C	0359	180	2.3	F	ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONG	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
798 CULG	16	0338	0342	0346	N08	W32	.526	16279	13.8	8	-N		C	0342	60	.7	LT	ZX
799 CULG	16	0354	0359	0405	N10	W39	.624	16279	13.2	11	-F		C	0359	50	.6	T	ZX
800 CULG	16	0419	0445	0530	S27	E10	.581	16285	16.9	71	-F		C	0445	70	.9	KF	ZX
GRP77801	16	0645>9	0658+2	0707	N08	W39	.625	16279	13.4	22	-B				130	1.7	F	
CULG	16	0645	0658	0707	N08	W40	.638	16279	13.3	22	1N		C	0658	160	2.1	T	
KANZ	16	0649	0700	0704	N08	W39	.625	16279	13.4	15	-B	1						
ATHN	16	0656	0659	0711	N09	W36	.583	16279	13.6	15	-B	3	C		95		F	
GRP77802	16	0651+2	0656+0	0702	N15	W69	.927	16275	11.1	11	-F							
CULG	16	0651	0656	0704	N15	W70	.933	16275	11.0	13	-F		C	0656	70			
KANZ	16	0653	0656	0700	N16	W68	.920	16275	11.2	7	-N	1						
GRP77803	16	0704+0	0707+1	0712	N03	E80	.984	16298	22.3	8	-N							
CULG	16	0704	0707	0712	N04	E80	.984	16298	22.3	8	1F		C	0707	160			
KANZ	16	0704	0708	0711	N03	E81	.987	16298	22.4	7	-N	1						
GRP77804	16	0759+0	0804+0	0823	N03	E85	.996	16298	22.7	24	-B				35			
ATHN	16	0759	0804	0823	N03	E85	.996	16298	22.7	24	-B	3	C		37		DE	
ATHN	16	0759	0804	0823	N03	E85	.996	16298	22.7	24	-B	1		0804	33	1.0		
805 LOCA	16	0855E	0855	0915	N07	E78	.976	16298	22.2	200	?N		V	0855	122	7.2	A	ZX
	IMP.2 NO : KANZ CATA																	
GRP77806	16	0937+1	0942+0 0950	1015	N06	E80	.983	16298	22.4	38	2B						FZ	
ATHN	16	0937	0942	1017	N03	E80	.984	16298	22.4	40	2B	3	C		350		Z F	
KANZ	16	0938	0942	1013	N06	E79	.980	16298	22.3	35	2B	2						
CATA	16	0945E	0950	1005D	N08	E90	1.000	16298	23.2	200	3B	2	P	0950				
807 KANZ	16	1252	1257	1305	N14	W80	.980	16275	10.5	13	-F	2						ZX
GRP77808	16	1256+1	1300+1	1316	N04	E78	.977	16298	22.4	20	-N							
RAMY	16	1256	1300	1312	N05	E72	.948	16298	21.9	16	-N	3	C					
KANZ	16	1257	1301	1320	N03	E84	.994	16298	22.8	23	-B	2						
	16	1406	1414	NO FLARE PATROL														
809 LVOV	16	1429	1445	1501	N22	E17	.376	16288	17.9	32	-N		C	1445	150	1.7		ZX
GRP77810	16	1440+3	1444+2	1452	N08	W44	.690	16279	13.3	12	-N							
KANZ	16	1440	1444	1452	N08	W44	.690	16279	13.3	12	-N	2						
LVOV	16	1443	1446	1452	N08	W45	.702	16279	13.2	9	1N		C	1446	200	2.8		
GRP77811	16	1448+6	1457+2	1506	S13	W15	.424	16284	15.5	18	-F						D	
KANZ	16	1448	1457	1511	S14	W16	.446	16284	15.4	23	-N	2						
LVOV	16	1454	1459	1501	S13	W15	.424	16284	15.5	7	-F		C	1459	150	1.7	D	
812 BIGB	16	1633	1636	1647	N03	E80	.984	16298	22.7	14	-B	2	C	1636	40			ZX
GRP77813	16	1740+4	1746+1	1807	N03	E78	.977	16298	22.6	27	-N				20			
PALE	16	1740	1747	1810D	N04	E76	.969	16298	22.4	30D	-F	3	C		13		DE	
BIGB	16	1744	1746	1803	N03	E80	.984	16298	22.7	19	-B	3	P	1746	30			
814 BIGB	16	1901	1902	1919	N03	E80	.984	16298	22.8	18	-B	3	C	1902	30			ZX
GRP77815	16	1950+1	1956+3	2051	N07	W41	.652	16279	13.8	61	-B				90	1.2		
PALE	16	1950	1956	2051	N07	W41	.652	16279	13.8	61	-B	3	C		79		DE	
BIGB	16	1951	1959	2048E	N08	W41	.651	16279	13.8	57D	-B	2	P	1959	100	1.4		
816 CULG	16	2152E	2157U	2219D	N14	W72	.945	16275	11.5	27D	-F		P	2157	60			ZX
817 CULG	16	2208E	2219U	2219D	N05	E71	.943	16298	22.2	11D	-F		P	2219	50			ZX
GRP77818	16	2316	2350+5	0054	N04	E76	.969	16298	22.7	98	1N				230		FHJ	
PALE	16	2316	2355	2359D	N04	E78	.977	16298	22.8	43D	2N	3	C		520		F	
MANI	16	2346E	2350U	0010D	N06	E71	.942	16298	22.3	24D	-F	3	C		50		F	
BIGB	16	2347	2352	0054	N03	E75	.965	16298	22.6	67	2N	3	C	2352	290			
VORO	16	2347E		0008D	N04	E80	.984	16298	23.0	21	1N		P	2349	179		DHJ	
819 VORO	17	0103E		0114D	S12	E68	.941	16304	22.1	11	-F		P	0104	108		DG	ZX
	17	0233	0252	NO FLARE PATROL														
	17	0302	0318	NO FLARE PATROL														
	17	0335	0348	NO FLARE PATROL														

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
	17	0427	0428	NO FLARE PATROL														
820 ABST	17	0513	0517	0524	N08	W49	.750	16279	13.5	11	-F		C	0517	87	1.4	D	ZX
GRP77821	17	0522+5	0528+2 0535	0604	N03	E69	.932	16298	22.4	42	1F				100		HJ	
ABST	17	0522	0528	0534D	N05	E69	.931	16298	22.4	12D	1N		P	0528	87		DJ	
YUNN	17	0525	0530	0530D	N03	E71	.944	16298	22.6	5D	1F		P		116		EH	
KANZ	17	0527	0535	0604	N03	E67	.919	16298	22.3	37	-F	1						
822 KANZ	17	0618	0626	0629	N09	W49	.749	16279	13.6	11	-F	1						ZX
823 ABST	17	0710	0719	0733	N08	W49	.750	16279	13.6	23	-F		C	0719	87	1.4	D	ZX
GRP77824	17	0720+5	0722+0	0732	N03	E71	.944	16298	22.6	12	-N							
ABST	17	0720	0722	0730	N03	E76	.969	16298	23.0	10	1N		C	0722	87		D	
KANZ	17	0722	0722	0734	N03	E71	.944	16298	22.6	12	-F	1						
ISTA	17	0725		0730D	N06	E69	.930	16298	22.5	5D	-N		V				E	
GRP77825	17	0930+1	0935+0	0942	N04	E72	.949	16298	22.8	12	?F							
KANZ	17 IMP.S	0930 IMP.2	0935	0943	N03	E74	.960	16298	22.9	13	?N	1						
BERN	17	0931	0935	0941	N05	E71	.943	16298	22.7	10	2F		C					
GRP77826	17	1034	103E	1042	N05	E67	.918	16298	22.5	8	-N							
BERN	17	1034	103E	1041	N05	E6E	.925	16298	22.5	7	-N		C					
KANZ	17	1037E	1037	1043	N05	E66	.911	16298	22.4	6D	-N	1						
827 HUAN	17	1440		1446	N06	W45	.703	16279	14.2	6	-F	1	C					ZX
828 BIGB	17	1543	1546	1559	N08	E67	.916	16298	22.7	16	-F	3	C	1546	40			ZX
GRP77829	17	1603+2	1605+1	1616	N08	E65	.902	16298	22.5	13	-N							
BIGB	17	1603	1606	1620	N08	E66	.909	16298	22.6	17	-N	3	C	1606	40			
RAMY	17	1605	1605	1612	N09	E65	.901	16298	22.5	7	-N	3	C					
GRP77830	17	1639+2	1643+4	1659	N08	E65	.902	16298	22.6	20	-N				40	.9		
BIGB	17	1639	1643	1701	N08	E66	.909	16298	22.6	22	-B	3	C	1643	50			
RAMY	17	1641	1647	1656	N08	E65	.902	16298	22.6	15	-N	3	C		25			
GRP77831	17	1703+2	1705+2 1720	1730	N04	E67	.918	16298	22.7	27	-N				70		F	
PALE	17	1703	1707	1730	N04	E67	.918	16298	22.7	27	-N	3	C		68		F	
BIGB	17	1704	1705	1743	N04	E6E	.925	16298	22.8	39	-N	3	C	1705	90			
RAMY	17	1705	1705	1714	N05	E67	.918	16298	22.7	9	-B	3	C		40			
RAMY	17	1719	1720	1726	N05	E6E	.911	16298	22.7	7	-N	3	C		26			
832 BIGB	17	1731	1734	1740	N15	E36	.590	16296	20.4	9	-N	3	C	1734	100	1.3	G	ZX
GRP77833	17	1810+7	1811 1818+1	1830	N06	E62	.879	16298	22.4	20	-N						F	
BIGB	17	1810	1811	1825	N08	E63	.886	16298	22.5	15	-N	3	C	1811	50	1.1		
PALE	17	1816	1818	1830	N06	E62	.879	16298	22.4	14	1F	3	C		185		F	
RAMY	17	1817	1818	1825	N08	E62	.878	16298	22.4	8	-N	3	C		24			
BIGB	17	1817	1819	1839	N02	E67	.920	16298	22.8	22	-N	3	C	1819	70			
834 PALE	17	1905	1905	1907	N06	E62	.879	16298	22.4	2	-F	3	C		24		F	ZX
835 BIGB	17	1911	1930	2024	N26	E90	.998	16310	24.5	73	-N	3	C	1930	40			ZX
836 CULG	17	2109	2113	2117	N06	E57	.835	16298	22.2	8	-N		C	2113	50	1.0	T	ZX
837 CULG	17	2241	2246	2251	N11	W61	.868	16279	13.4	10	-F		C	2246	30	.6		ZX
GRP77838	17	2242+0	2243+0	2246	N03	E62	.882	16298	22.6	4	-N				70	1.5	V	
CULG	17	2242	2243	2247	N04	E61	.873	16298	22.5	5	-N		C	2243	80	1.6	VT	
BIGB	17	2242	2243	2245	N03	E63	.890	16298	22.7	3	-B	2	C	2243	70	1.6		
839 CULG	17	2251	2254	2258	N06	E57	.835	16298	22.2	7	-F		C	2254	50	1.0	T	ZX
840 CULG	17	2312	2313	2318	N04	E60	.864	16298	22.5	6	-F		C	2313	20	.4	T	ZX
841 CULG	17	2317	2325	0002	N08	W56	.824	16279	13.8	45	-F		P	2325	60	1.2		ZX
842 CULG	18	0001	0011	0020	N12	W63	.885	16279	13.3	19	-N		C	0011	20	.4	T	ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	HeMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Millionths of Disk	CORR. AREA Sq. Deg.		
GRP77843	18	0021+1	0025+1	0037	N07	E60	.862	16298	22.5	16	1B				100	2.1		
CULG	18	0021	0026	0039	N08	E60	.861	16298	22.5	18	1B		C	0026	110	2.2		
BIGB	18	0022	0025	0035	N07	E61	.870	16298	22.6	13	1B	3	C	0025	100	2.1		
844 CULG	18	0051	0106U	0145	N25	E88	.996	16310	24.6	54	-F		C	0106	30		T	ZX
845 CULG	18	0124	0128	0139	N05	E58	.845	16298	22.4	15	-F		C	0128	40	.8		ZX
846 CULG	18	0149	0159	0220	N22	E60	.862	16307	22.6	31	-N		C	0159	80	1.5	F	ZX
847 CULG	18	0224	0235	0250U	N25	E87	.995	16310	24.6	260	-F		C	0235	30		T	ZX
848 CULG	18	0302	0314	0329	N12	W65	.900	16279	13.3	27	-F		C	0314	20	.4	T	ZX
849 CULG	18	0326	0332	0340	S25	E50	.851	16300	21.9	14	-N		C	0332	20	.4	T	ZX
850 CULG	18	0419	0435	0447	S21	E50	.835	16300	21.9	28	-F		C	0435	80	1.5		ZX
851 CULG	18	0603	0606	0630	S21	E51	.843	16300	22.1	27	-N		C	0606	60	1.1	L	ZX
852 CULG	18	0632	0649U	0653D	N10	W64	.893	16279	13.5	210	-N		P	0649	30	.7	T	ZX
853 YUNN	18	0658	0708	0718	S21	E82	.996	16305	24.4	20	?N		C		64			ZX
	IMP.1 NO : MONT																	
854 CATA	18	0710E	0800	0915D	N22	E80	.978		24.3	125D	?N	2	P	0800	112			ZX
	IMP.1 NO : YUNN			KANZ	MONT	HTPR												
855 HTPR	18	0728		0736D	S18	E90	1.001	16305	25.1	8D	-F		C	0732	20			ZX
856 HTPR	18	0744E		0748D	S18	E90	1.001	16305	25.1	4D	-N		C	0746	30			ZX
GRP77857	18	0746+4	0751?9 0823	0856	N09	W63	.886	16279	13.6	70	1N				130	2.9	E	
KANZ	18	0746	0823	0910	N10	W64	.893	16279	13.5	84	1N	2						
YUNN	18	0747	0808	0855	N10	W64	.893	16279	13.5	68	1B		C		209	4.8	E	
MONT	18	0748	0804	0804D	N08	W62	.878	16279	13.7	16D	-N		C	0804	110		E	
CATA	18	0750	0800	0915D	N12	W60	.859	16279	13.8	85D	1B	2	P	0800	168	3.4		
HTPR	18	0755E	0804	0835	N09	W63	.886	16279	13.6	40D	-N		C	0804	50	1.1	E	
ATHN	18	0757E	0758U	0844	N07	W62	.879	16279	13.7	47D	-B	2	C		95		DE	
GRP77858	18	0835		0930	S20	E87	1.000	16305	24.9	55	-F						A	
KANZ	18	0835		0928	S21	E84	.999	16305	24.7	53	-F	2						
ISTA	18	0920E		0932	S20	E90	1.001	16305	25.1	12D	-F		V				AB	
859 HTPR	18	1038	1036	1044	S18	E90	1.001	16305	25.2	14	-F		C	1036	20			ZX
860 HTPR	18	1033	1036	1040	N25	E80	.978	16310	24.4	7	-F		C	1036	10			ZX
GRP77861	18	1224+5	1230+6	1239	N03	E55	.818	16298	22.6	15	-F							
HTPR	18	1224	1230	1237	N04	E55	.817	16298	22.6	13	-F		C	1230	30	.5		
KANZ	18	1229	1236	1239	N02	E54	.809	16298	22.6	10	-F	1						
BERN	18	1229	1231	1240	N03	E55	.818	16298	22.6	11	1F		C		150			
862 HTPR	18	1253	1254	1309	N04	E56	.827	16298	22.7	16	-F		C	1254	20	.4	E	ZX
GRP77863	18	1405+3	1424+3 1446	1452	S18	E78	.987	16305	24.4	47	-F				35		A	
KANZ	18	1405	1426	1446	S18	E77	.985	16305	24.4	41	-F	2						
RAMY	18	1408	1424	1458	S18	E76	.982	16305	24.3	50	-F	3	C					
HTPR	18	1420	1424	1440	S18	E90	1.001	16305	25.3	20	-F		C	1424	40			
BIGB	18	1423	1427	1440	S19	E80	.992	16305	24.6	17	-N	2	C	1427	30		A	
BIGB	18	1444	1446	1516	S19	E80	.992	16305	24.6	32	-N	3	C	1446	40		A	
GRP77864	18	1432+3	1437+3	1513	N03	E53	.798	16298	22.6	41	1B							
BERN	18	1432	1438	1508	N02	E56	.829	16298	22.8	36	1N		C		300			
KANZ	18	1432	1440	1516	N03	E52	.787	16298	22.5	44	1B	2						
BIGB	18	1433	1440	1515	N05	E52	.785	16298	22.5	42	1B	2	C	1440	240	4.0		
HTPR	18	1433	1438	1515	N03	E51	.777	16298	22.4	42	1B		C	1438	200	3.1	E	
RAMY	18	1435	1437	1503	N08	E50	.761	16298	22.4	28	-B	3	C		160		FDE	
WEND	18	1438E		1514	N02	E54	.809	16298	22.7	36D	1N		C	1446	160	2.8	T	
LOCA	18	1440E	1440	1510	N05	E54	.806	16298	22.7	30D	2N		V	1440	367	6.6		
HOLL	18	1440E	1440U	1642	N05	E52	.785	16298	22.5	122D	2B	2	C		435		F	
HUAN	18	1441E		1444D	N02	E55	.819	16298	22.7	3D	-N	1	P	1441	30	.5		

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONO	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP77865	18	1437+7	1441+8	1524	N09	W66	.908	16279	13.7	47	-N				60			
HTPR	18	1437	1448	1530	N09	W70	.935	16279	13.4	53	-F		C	1448	30		E	
LOCA	18	1440E	1442	1520	N09	W62	.878	16279	14.0	40D	1N		V	1442	143	2.9		
RAMY	18	1441	1441	1529	N07	W66	.909	16279	13.7	48	-B	3	C					
KANZ	18	1442	1446	1522	N10	W66	.908	16279	13.7	40	-N	2						
HOLL	18	1443	1449	1542	N08	W65	.902	16279	13.7	59	-B	2	C		67		F	
BIGB	18	1444	1446	1510	N08	W66	.909	16279	13.7	26	-B	3	C	1446	50			
WEND	18	1446E		1520	N09	W65	.901	16279	13.7	34D	-N		C	1446	60		B	
866 BIGB	18	1700	1706	1711	N26	E79	.974	16310	24.6	11	-N	3	C	1706	20			ZX
867 BIGB	18	1734	1739	1817	S18	E03	.428	16295	19.0	43	-N	3	C	1739	140	1.4	G	ZX
868 HOLL	18	1756	1756	1805	N05	E54	.806	16298	22.8	9	-N	3	C		24			ZX
GRP77869	18	1922+4	1924 1934	1950	N03	E49	.754	16298	22.5	28	-N							
BIGB	18	1922E	1924	1935	N05	E46	.717	16298	22.3	13D	-B	2	P	1924	40	.6		
BIGB	18	1926	1934	2004	N02	E52	.789	16298	22.7	38	-N	2	C	1934	70	1.2		
	18	2115	2126	NO FLARE PATROL														
870 HOLL	18	2159	2201	2207	N06	E47	.728	16298	22.4	8	-N	3	C		34			ZX
	18	2208	2209	NO FLARE PATROL														
GRP77871	18	2305	2313+6	2329	N04	E50	.764	16298	22.7	24	-N						DK	
VORO	18	2305	2313	2326	N05	E50	.763	16298	22.7	21	-N		C	2313	116	1.8	DK	
BIGB	18	2318E	2319	2331	N03	E51	.777	16298	22.8	13D	-B	2	P	2319	30	.5		
GRP77872	19	0044+8	0054+0	0144D	N25	E75	.958	16310	24.7	60	-N						FK	
CULG	19	0044	0054	0144U	N25	E74	.954	16310	24.6	60D	1F		C	0054	80		FKT	
BIGB	19	0052	0054	0056E	N26	E76	.963	16310	24.7	4D	-N	1	P	0054	30			
873 VORO	19	0151	0159	0208	N04	E50	.764	16298	22.8	17	-N		C	0159	63	1.0	DJ	ZX
874 CULG	19	0241	0246	0257	N07	E51	.773	16298	22.9	16	-F		C	0246	30	.5		ZX
875 CULG	19	0258	0310	0321	N10	W77	.970	16279	13.3	23	-N		C	0310	60		T	ZX
876 CULG	19	0307	0313	0327	S12	E06	.343	16295	19.6	20	-F		C	0313	20	.2		ZX
877 CULG	19	0327	0335	0421	N17	E72	.944	16312	24.5	54	?N		C	0335	140		HG	ZX
	IMP.1 NO ! MITK YUNN																	
878 CULG	19	0355	0424	0440	S26	W35	.737	16285	16.5	45	-F		C	0424	70	1.0		ZX
GRP77879	19	0356+4	0405+3 0423	0442	N10	W76	.966	16279	13.5	46	1N				220		E	
YUNN	19	0356	0405	0415	N11	W76	.966	16279	13.5	19	1N		C		193			
CULG	19	0357	0408	0541	N10	W75	.962	16279	13.5	104	2N		C	0408	210			
MITK	19	0400	0406	0441	N10	W72	.946	16279	13.8	41	1N		C	0406	170		E	
TACH	19	0412E	0412	0440	N09	W77	.971	16279	13.4	28D	1N		C	0412	309		EB	
PURP	19	0415E	0415	0422	N08	W78	.975	16279	13.3	7D	1N		P					
YUNN	19	0418	0423	0445	N10	W74	.957	16279	13.6	27	1N		C		193		E	
GRP77880	19	0411+2	0415+5	0432	N03	E46	.719	16298	22.6	21	1N				220	3.2	E	
CULG	19	0411	0420	0434U	N03	E47	.731	16298	22.7	23D	1N		C	0420	180	2.7		
MITK	19	0413	0417	0432	N03	E46	.719	16298	22.6	19	1F		C	0417	170	2.6	E	
TACH	19	0414E	0415	0430D	N03	E46	.719	16298	22.6	16D	1N		C	0415	309	4.6	E	
PURP	19	0415E	0415	0430	N05	E40	.640	16298	22.2	15D	1B		P					
881 CULG	19	0615	0619	0639	S21	E35	.700	16300	21.9	24	-F		C	0619	50	.7	L	ZX

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP77882	19	0645+3	0648 0710+7	0757	N03	E43	.682	16298	22.5	72	1N						IJZ	
CULG	19	0645	0712	0723D	N03	E42	.669	16298	22.4	38D	2N		C	0712	460	6.4	FIJ	
ATHN	19	0645	0648	0659	N05	E42	.667	16298	22.4	14	-N	1		0648	33	.4		
WEND	19	0647	0710	0725	N06	E41	.653	16298	22.4	38	-F		C	0710	80	1.1	EZ	
PURP	19	0648	0717	0730	N03	E45	.707	16298	22.7	42	2B		C		566	7.8		
ISTA	19	0700E		0725	N07	E42	.665	16298	22.4	25D	-N		V				E	
WEND	19	0707		0817	N02	E42	.671	16298	22.4	70	-F		C	0710	88	1.2		
MONT	19	0708E	0710	0846	N04	E43	.681	16298	22.5	98D	1N		C	0710	250			
ISTA	19	0708		0730D	N02	E44	.696	16298	22.6	22D	-F		V				E	
ATHN	19	0709	0712	0809	N05	E44	.692	16298	22.6	60	1B	3	C		190		F	
MITK	19	0710E	0712	0732D	N03	E45	.707	16298	22.7	22D	1N		C	0712	220	3.1	E	
KANZ	19	0715E		0845	N02	E42	.671	16298	22.5	90D	1N	2					F	
CATA	19	0720E	0755	0845	N02	E44	.696	16298	22.6	85D	1B	2	P	0755	196	2.8		
YUNN	19	0725E	0726	0745D	N02	E45	.709	16298	22.7	20D	1N		P		193	2.8		
GRP77883	19	0711+2	0714+2	0721	N06	W74	.959	16279	13.7	10	-N				70			
ATHN	19	0711	0714	0731	N05	W73	.954	16279	13.8	20	-B	3	C		64		DE	
CULG	19	0711	0716	0722	N07	W75	.963	16279	13.7	11	1B		C	0716	90			
MONT	19	0713	0716	0720	N06	W76	.968	16279	13.6	7	-F		C	0716	50			
KANZ	19	0715E	0715	0720	N07	W73	.953	16279	13.8	5D	-B	1						
884 CATA	19	1100	1120	1145D	S22	E28	.643	16300	21.6	45D	-F	2	P	1120	112	1.5		ZX
885 RAMY	19	1219	1219	1221D	N06	E39	.626	16298	22.4	2D	-B	3	C		36			ZX
886 HTPR	19	1235E		1250	N05	E37	.600	16298	22.3	15D	-F		C	1235	30	.4	E	ZX
GRP77887	19	1353+0	1358+1 1408+0	1423	N09	W78	.975	16279	13.7	30	1B				120		A	
KANZ	19	1353	1359	1423	N09	W80	.982	16279	13.6	30	1B	3					A	
HOLL	19	1353E	1358	1423	N08	W75	.962	16279	14.0	30D	1B	3	C				FDE	
HTPR	19	1405E		1414D	N09	W80	.982	16279	13.6	9D	1N		C	1407	120		ABE	
BIGB	19	1407E	1408	1422	N08	W75	.962	16279	14.0	15D	1B	2	P	1408	390		A	
LOCA	19	1408E	1408	1425	N10	W80	.982	16279	13.6	17D	1N		V	1408	82	4.8	A	
GRP77888	19	1407+8	1420+0	1512	N05	E38	.613	16298	22.4	65	-N				80	1.0	E	
HOLL	19	1407	1420	1524	N04	E39	.628	16298	22.5	77	-B	3	C		93		DE	
LOCA	19	1415	1420	1500	N07	E38	.612	16298	22.4	45	-N		V	1420	82	1.1		
HTPR	19	1420E		1446D	N05	E37	.600	16298	22.4	26D	-F		C	1431	30	.4	E	
GRP77889	19	1449+2	1451+0	1503	S14	E01	.361	16295	19.7	14	-N						G	
BIGB	19	1449	1451	1502	S14	E02	.362	16295	19.8	13	-N	2	C	1451	60	.6	G	
KANZ	19	1451	1451	1503	S15	E01	.377	16295	19.7	12	-N	1					G	
GRP77890	19	1600+2	1602+1	1627	N05	E36	.586	16298	22.4	27	-B				20	.2		
HOLL	19	1542	1603	1632	N05	E36	.586	16298	22.4	50	-B	3	C		30		DE	
KANZ	19	1600	1602	1605D	N05	E36	.586	16298	22.4	5D	-B	1						
BIGB	19	1602	1603	1622	N07	E36	.584	16298	22.4	20	-B	2	C	1603	10	.1		
GRP77891	19	1740+2	1744+2	1806	N06	E36	.585	16298	22.4	26	-B				70	.9		
PALE	19	1740	1744	1806	N06	E36	.585	16298	22.4	26	-B	3	C		74		FDE	
HUAN	19	1741E		1754	N06	E35	.570	16298	22.4	13D	-N	1	P	1743	20	.2	D	
BIGB	19	1742	1746	1816	N04	E39	.628	16298	22.7	34	-B	3	C	1746	100	1.3		
GRP77892	19	1828+3	1835 1844	1908	N05	E36	.586	16298	22.5	40	-F						FU	
PALE	19	1828	1844	1903	N06	E36	.585	16298	22.5	35	-F	3	C		66		U F	
HUAN	19	1838		1910D	N03	E41	.656	16298	22.8	40D	-F	1	P					
BIGB	19	1831	1835	1908D	N05	E35	.572	16298	22.4	37D	-N	3	P	1835	160	2.0		
GRP77893	19	1916+2	1924 1954	2019	N05	E37	.600	16298	22.6	63	-N							
PALE	19	1916	1954	2022	N05	E37	.600	16298	22.6	66	-N	3	C		114		FDE	
BIGB	19	1918	1924	2015	N05	E35	.572	16298	22.4	57	-N	2	P	1924	120	1.5		
HUAN	19	1931E		1935D	N03	E39	.630	16298	22.7	4D	-F	1	P				E	
894 HOLL	19	2009	2012	2040	S25	W41	.780	16285	16.8	31	-N	3	C		60			ZX
895 PALE	19	2025	2027	2030	N04	E37	.601	16298	22.6	5	-F	*	C		28		FDE	ZX
GRP77896	19	2031+8	2046 2050+8	2158	N05	E35	.572	16298	22.5	87	1B				400	4.9	FIU	
HOLL	19	1709	2050	2158	N05	E36	.586	16298	22.4	289	1B	*	C		336		U F	
PALE	19	2031	2057U	2149	N05	E34	.557	16298	22.4	78	2N	*	C		462		U F	
PALE	19	2031	2046	2047	N05	E34	.557	16298	22.4	16	1N	*	C		249		FDE	
BIGB	19	2039	2052	2129D	N05	E37	.600	16298	22.6	50D	1B	*	P	2052	210	2.7		
CULG	19	2056	2058U	2256D	N04	E34	.559	16298	22.4	120D	2N	*	P	2058	660	8.2	FI	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
897 CULG	19	2113	2140	2153	S23	W43	.785	16285	16.7	40	-N		C	2140	50	.9	HT	ZX
898 CULG	19	2120	2123	2126	N19	W81	.982	16279	13.8	6	-F		C	2123	40			ZX
899 PALE	19	2206	2218U	2240	N09	E36	.583	16298	22.6	34	-F	*	C		68			ZX
900 HOLL	19	2247	2256	2307	S20	E60	.906	16305	24.4	20	-N	3	C		31			ZX
GRP77901	19	2256+0	2303+8 2319	0103	N06	E33	.542	16298	22.4	127	3B				1330	15.9	UVZ	
PURP	20	0047E	0047	0140	N05	E33	.543	16298	22.5	53D	2N	*	P		491	5.8		
CULG	19	2256	2311	0206U	N06	E32	.527	16298	22.4	190D	3B	*	C	2311	1580	18.0	VZF	
HOLL	19	2256	2303	0025D	N06	E33	.542	16298	22.4	89D	3B	*	C		1203		UDE	
PALE	19	2304E	2307	0010D	N06	E32	.527	16298	22.4	66D	3B	*	C		1301		F	
BIGB	19	2317E	2319	0023	N04	E34	.559	16298	22.5	66D	2B	*	P	2319	580	7.2		
902 CULG	19	2302	2309	2329	S23	W44	.794	16285	16.7	27	-N		C	2309	60	1.0	HK	ZX
GRP77903	19	2313+6	2337+1	2347	N26	E58	.850	16310	24.3	34	-F				25	.5		
CULG	19	2313	2337	2347	N25	E56	.832	16310	24.2	34	-F		C	2337	30	.5		
HOLL	19	2319	2338	2346	N28	E60	.868	16310	24.5	27	-N	3	C		19			
GRP77904	19	2341>9	2358+1	0024	S19	E62	.917	16305	24.6	43	-B							
HOLL	19	2341	2359	0024	S20	E60	.906	16305	24.5	43	-B	3	C		55			
BIGB	19	2357	2358	2359D	S19	E64	.929	16305	24.8	20	-B	2	P	2358	20	.5		
905 CULG	19	2351	2403	0025	N12	W85	.994	16279	13.6	34	-F		C	2403	30			ZX
906 CULG	19	2355	2359	0011	S19	W60	.903		15.5	16	-N		C	2359	40	1.0		ZX
907 CULG	20	0037	0041	0049	S23	W47	.818	16285	16.5	12	-N		C	0041	40	.6	H	ZX
908 CULG	20	0131	0139	0146	S23	W47	.818	16285	16.5	15	-F		C	0139	30	.5	H	ZX
909 CULG	20	0201	0205	0231	S39	E50	.909	16306	23.8	30	?N		C	0205	120	2.7		ZX
	IMP.1 NO : PALE PURP																	
910 CULG	20	0214	0220	0233	N19	W85	.993	16279	13.7	19	?N		C	0220	60			ZX
	IMP.1 NO : PALE PURP YUNN																	
911 CULG	20	0305	0308	0312	S23	W48	.827	16285	16.5	7	-N		C	0308	40	.6	H	ZX
912 YUNN	20	0343E	0353	0405	N06	E30	.497	16298	22.4	22D	?N		C		177	2.0	E	ZX
	IMP.1 NO : CULG PURP																	
913 CULG	20	0344	0347	0400	S23	W48	.827	16285	16.6	16	-F		C	0347	30	.5	KH	ZX
GRP77914	20	0454	0510	0524	N04	E29	.485	16298	22.4	30	-N							
CULG	20	0454	0510	0537	N04	E29	.485	16298	22.4	43	1N		C	0510	360	4.1	TF	
TACH	20	0500E		0510	N05	E30	.499	16298	22.5	10D	-N		V	0500	177	2.0	E	
915 CULG	20	0527	0546	0658	S19	E60	.903	16305	24.7	91	-F		C	0546	80	1.8		ZX
GRP77916	20	0705>9	0721	0722	S23	W49	.835	16285	16.6	17	-N				35	.6	DH	
CULG	20	0705	0721	0723	S23	W50	.843	16285	16.5	18	-N		C	0721	30	.5	H	
BUCA	20	0720		0721	S23	W48	.827	16285	16.7	1	-N		C	0720	43	.8	D	
GRP77917	20	0758+1	0800+3	0816	N05	E24	.406	16298	22.1	18	1N				300	3.3	EHJU	
ATHN	20	0559E	0800U	0810	N04	E25	.424	16298	22.1	131D	-B	*	C		159		DE	
YUNN	20	0758	0801	0810	N05	E22	.374	16298	22.0	12	1N	*	C		306	3.3	EH	
KANZ	20	0758	0801	0816	N05	E24	.406	16298	22.1	18	1B	*					F	
BUCA	20	0759	0803	0811	N06	E25	.420	16298	22.2	12	1N	*	C	0803	322	3.6		
MONT	20	0759	0803	0824	N05	E25	.422	16298	22.2	25	1N	*	C	0803	250			
TELV	20	0759	0801	0832	N09	E20	.340	16298	21.8	33	-B	*			122	1.3	TU	
TELV	20	0759E	0759	0812	N06	E27	.452	16298	22.4	13D	-N	*			81	.9	TF	
ATHN	20	0759E	0800U	0810	N04	E25	.424	16298	22.2	11D	-B	*	C		159		DE	
ABST	20	0759	0802	0815	N05	E27	.453	16298	22.4	16	1N	*	P	0802	218	2.5	EJ	
ABST	20	0800	0803	0819	N07	E19	.323	16298	21.8	19	1N	*	P	0803	192	2.1	EJ	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
GRP77918	20	0838>9	0853+2	0946	N05	E27	.453	16298	22.4	68	1N						HWZ
			0938														
KANZ	20	0838	0853	0947	N05	E27	.453	16298	22.4	69	1N	2					F
MONT	20	0839	0855	0944	N05	E25	.422	16298	22.2	65	-N		C	0855	110		EFZ
TELV	20	0845	0845	1002	N06	E21	.357	16298	21.9	77	-B	2			3		WD
CATA	20	0850	0855	0945	N03	E31	.517	16298	22.7	55	1N	2	C	0855	168	2.0	T
TELV	20	0854	0855	0855	N06	E30	.497	16298	22.6	1	-N	3			20	.2	
TELV	20	0854	0855	0855	N09	E29	.481	16298	22.5	1	-N	3			6		
YUNN	20	0908	0920	09200	N04	E28	.470	16298	22.5	120	1N		C		209	2.4	EH
TELV	20	0937	0938	0939D	N11	E29	.483	16298	22.6	2D	-N	3			20	.2	
919 TELV	20	1002	1004	1011	S17	E56	.869	16305	24.6	9	-N	3			20	.3	ZX
920 KANZ	20	1005		1031D	N21	W12	.311		19.5	26D	-F	1					F ZX
GRP77921	20	1054+8	1057+2	1128	S11	E08	.339	16303	21.1	34	-N						G
TELV	20	1054	1057	1132D	S11	E09	.346	16303	21.1	38D	-N	3			20	.2	
KANZ	20	1054	1059	1123	S10	E08	.324	16303	21.1	29	-F	1					G
CATA	20	1100E	1100	1105D	S12	E07	.348	16303	21.0	5D	-N	2	P	1100	56	.6	
922 TELV	20	1059	1100	1126	N04	E03	.075		20.7	27	-F	3			49	.5	ZX
923 TELV	20	1112	1113	1122	N24	E29	.538	16307	22.6	10	-N	3			24	.3	ZX
GRP77924	20	1146+5	1151+1	1156D	N07	E24	.404	16298	22.3	10	-B						EK
LVOV	20	1146	1152	1256	N06	E24	.405	16298	22.3	70	1N		C	1152	250	2.8	EK
TELV	20	1151	1151	1156	N08	E24	.404	16298	22.3	5	-B	3			27	.3	
925 RAMY	20	1200E	1249	1357	N28	E61	.876	16310	25.1	117D	-F	3	C		44		ZX
GRP77926	20	1208>9	1219	1358	S13	E51	.814	16305	24.3	118	-N						
			1257														
RAMY	20	1208E	1257	1358	S14	E53	.836	16305	24.5	118D	-N	3	C		130		
TELV	20	1217	1219	1318D	S12	E49	.792	16305	24.2	61D	-N	3			3		
927 TELV	20	1226	1227	1232	N15	E26	.449	16298	22.5	6	-B	3			15	.2	ZX
GRP77928	20	1317	1342+5	1414	N05	E25	.422	16298	22.4	57	-N						
RAMY	20	1317	1342	1419	N06	E25	.420	16298	22.4	62	-B	3	C		173		F
KANZ	20	1330E	1342	1414	N05	E25	.422	16298	22.4	44D	-N	1					F
LVOV	20	1337	1347	1415	N06	E23	.389	16298	22.3	38	1F		C	1347	300	3.3	E
HUAN	20	1337		1352	N05	E25	.422	16298	22.4	15	-F	1	C				E
HOLL	20	1340E	1342U	1412	N05	E24	.406	16298	22.4	32D	-B	3	C		104		DE
GRP77929	20	1428>9	1458+4	1513	N06	E24	.405	16298	22.4	45	-N				30	.3	
RAMY	20	1428	1458	1511	N06	E24	.405	16298	22.4	43	-N	3	C		35		
HOLL	20	1459	1502	1514	N06	E24	.405	16298	22.4	15	-B	3	C		24		DE
GRP77930	20	1517+3	1535+5	1604	N06	E24	.405	16298	22.4	47	-N				40	.4	F
HOLL	20	1517	1536	1604	N06	E24	.405	16298	22.4	47	-N	3	C		39		F
RAMY	20	1520	1535	1555	N06	E24	.405	16298	22.4	35	-N	3	C		38		
BIGB	20	1534	1540	1611	N05	E25	.422	16298	22.5	37	-F	2	C	1540	50	.6	
931 HOLL	20	1633	1633	1644	N28	E53	.811	16310	24.7	11	-F	*	C		16		ZX
GRP77932	20	1633+3	1639+2	1702	N05	E25	.422	16298	22.6	29	-N				40	.4	D
HUAN	20	1633		1648	N04	E25	.424	16298	22.6	15	-F	1	C	1638	20	.2	D
HOLL	20	1634	1639	1702	N06	E23	.389	16298	22.4	28	-B	3	C		36		DE
BIGB	20	1636	1641	1738	N05	E25	.422	16298	22.6	62	-N	2	C	1641	50	.6	
933 BIGB	20	1751	1801	1824	N13	W90	1.000	16279	14.0	33	-N	2	C	1801	30		ZX
GRP77934	20	1819>9	1834	1959	N05	E22	.374	16298	22.4	100	1B				220	2.4	EU
			1859+7														
BIGB	20	1819	1834	1837	N05	E25	.422	16298	22.6	18	-N	2	C	1834	50	.6	
PALE	20	1821	1906	1907D	N05	E22	.374	16298	22.4	46D	1B	3	C		346		FDE
PALE	20	1821	1859	1900D	N05	E22	.374	16298	22.4	39D	1N	3	C		246		
HOLL	20	1827	1904	1948	N07	E21	.356	16298	22.3	81	1B	3	C		198		UDE
HUAN	20	1834		1924D	N05	E25	.422	16298	22.6	50D	-N	1	P	1900	150	1.6	E
BIGB	20	1856	1859	2007	N05	E23	.390	16298	22.5	71	1B	2	C	1859	210	2.4	
RAMY	20	1937E	1941U	1959D	N06	E21	.357	16298	22.4	22D	-N	3	C		65		
GRP77935	20	2043+8	2105+2	2131	N05	E22	.374	16298	22.5	48	-N						F
CULG	20	2043E	2105U	2139U	N05	E23	.390	16298	22.6	56D	-N		P	2105	120	1.3	TF
HOLL	20	2051	2107	2123	N06	E21	.357	16298	22.4	32	-N	3	C		42		
936 CULG	20	2111	2115	2127	N20	W88	.997	16279	14.3	16	?F		C	2115	50		ZX
	IMP.1 NO 1 BIGB HOLL																

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX HEL. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
937 CULG	20	2127	2133	2140	S22	E44	.788	16305	24.2	13	-F		C	2133	30	.5		ZX
938 CULG	20	2150	2154	2216U	N03	E23	.395	16298	22.6	26D	?N		C	2154	230	2.5	VFT	ZX
	IMP.1 NO I BIGB HOLL																	
939 CULG	20	2204	2217	2223	S19	E49	.818	16305	24.6	19	-N		C	2217	80	1.4		ZX
GRP77940	20	2207+7	2217 2240	2252	N26	W64	.895	16282	16.1	45	-F						G	
CULG	20	2207	2217U	2242D	N26	W64	.895	16282	16.1	35D	1F		C	2217	200	4.5		
ZX BIGB	20	2214	2240	2252	N27	W64	.896	16282	16.1	38	-F	2	C	2240	60	1.4	G	
ZX GRP77941	20	2255+2	2305 2318	0002	N05	E20	.342	16298	22.5	67	-N							
BIGB	20	2255	2305	0006	N04	E21	.360	16298	22.5	71	-N	2	C	2305	60	.7		
HOLL	20	2257	2318	2357	N06	E19	.324	16298	22.4	60	-B	3	C		77		DE	
942 CULG	20	2257E	2258	2304	S18	E49	.814	16305	24.6	7D	-N		C	2258	60	1.1		ZX
ZX GRP77943	20	2341+5	2350	2358	S22	W59	.904	16285	16.6	17	-N							
HOLL	20	2341	2359	0001D	S20	W60	.906	16285	16.5	20D	-B	3	C		55			
ZX CULG	20	2346	2350	2355	S24	W58	.903	16285	16.6	9	-N		C	2350	40	1.0		
944 CULG	21	0003	0010	0121	N27	E38	.658	16310	23.9	78	?F		C	0010	310	4.0	S	ZX
	IMP.1 NO I PURP HOLL BIGB																	
945 CULG	21	0030	003E	0047	N05	E24	.406	16298	22.8	17	-F		C	0036	30	.3	H	ZX
ZX GRP77946	21	0058>9	0058 0128	0153	N03	E20	.347	16298	22.5	55	-N							
PURP	21	0058E	0058	0151	N05	E18	.309	16298	22.4	53D	-N		P					
CULG	21	0122	0128	0155	N02	E22	.383	16298	22.7	33	-N		C	0128	110	1.2	T	
947 CULG	21	0104	0111	0121	S21	E45	.792	16305	24.4	17	-F		C	0111	40	.6		ZX
ZX 948 CULG	21	0120	0125	0144	N10	E45	.702	16312	24.4	24	-F		C	0125	50	.7	G	ZX
GRP77949	21	0142+6	0151+2	0203	N06	E18	.308	16298	22.4	21	-N							
CULG	21	0142	0153	0210	N08	E18	.307	16298	22.4	28	-N	*	C	0153	100	1.1	T	
PURP	21	0148	0151	0155	N05	E18	.309	16298	22.4	7	-N	*	C					
GRP77950	21	0228>9	0254 0312+0	0335	N05	E18	.309	16298	22.5	67	1N						I	
CULG	21	0228	0254	0335U	N05	E17	.293	16298	22.4	67D	2N		C	0254	480	5.0	FIT	
PURP	21	0255	0312	0337	N05	E18	.309	16298	22.5	42	-N		P					
YUNN	21	0308	0312	0320	N07	E18	.307	16298	22.5	12	1N		C		193	2.0	E	
951 PURP	21	0348	0351	0417	N05	E17	.293	16298	22.4	29	-N		P					ZX
952 CULG	21	0430	0445U	0508U	N05	E15	.260	16298	22.3	38D	1N		C	0445	300	3.2	T	ZX
953 CULG	21	0438	0452	0507	S25	W60	.918	16285	16.7	29	-N		C	0452	60			ZX
ZX 954 ABST	21	0507	0509	0511	N25	E45	.726	16310	24.6	4	-F		C	0509	79	1.2	DJ	ZX
955 CULG	21	0514	0521	0529	N04	E15	.263	16298	22.3	15	-N		C	0521	100	1.0	T	ZX
956 YUNN	21	0934	0935	0950	N08	E14	.240	16298	22.4	16	1N		C		314	3.3		ZX
ZX	21	1110	1152	NO FLARE PATROL														
GRP77957	21	1212+1	1218	1239	N05	E09	.160	16298	22.2	27	-F							
HTPR	21	1212		1221D	N04	E08	.149	16298	22.1	9D	-F		C	1214	20	.2		
LVOV	21	1213	1218	1239	N06	E10	.174	16298	22.3	26	-N		C	1218	100	1.1		
	21	1253	1257	NO FLARE PATROL														
958 HTPR	21	1330E		1337	S17	E36	.682	16305	24.3	7D	-F		C	1332	20	.2	E	ZX
GRP77959	21	1336+2	1338+3 1401	1405	N06	E11	.191	16298	22.4	29	-N				110	1.1	E	
HTPR	21	1336	1338	1405	N07	E11	.189	16298	22.4	29	-B		C	1338	150	1.5	E	
HUAN	21	1338	1341	1352	N07	E12	.206	16298	22.5	14	-N	2	C	1341	75	.7	E	
HUAN	21	1359	1401	1404	N05	E11	.193	16298	22.4	5	-N	1	C	1401	45	.5		
ZX																		

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
968 LVOV	21	1413	1413	1424	N03	E10	.187	16298	22.3	11	-N		C	1413	100	1.1	C	ZX
GRP77961	21	1457>9	1507+2	1527	N02	E12	.225	16298	22.5	30	-N							
RAMY	21	1457	1509	1533	N02	E15	.272	16298	22.7	36	-B	3	C		80		F	
HTPR	21	1507	1507	1520	N02	E10	.194	16298	22.4	13	-F		C	1507	30	.3	E	
GRP77962	21	1520>9	1532+3	1559	S09	E02	.279	16304	21.8	39	-F				45	.5		
RAMY	21	1520	1532	1556	S09	E03	.282	16304	21.9	36	-F	3	C		49			
HOLL	21	1535	1535	1602	S09	E02	.279	16304	21.8	27	-F	3	C		44			
GRP77963	21	1544+0	1546+4	1604	N03	E11	.203	16298	22.5	20	-N				50	.5	E	
BIGB	21	1544	1550	1559	N03	E11	.203	16298	22.5	15	-N	2	C	1550	50	.5		
RAMY	21	1544	1546	1608	N03	E11	.203	16298	22.5	24	-B	3	C		115			
HTPR	21	1546E		1549D	N02	E10	.194	16298	22.4	3D	-N		C	1549	50	.5	E	
GRP77964	21	1618>9	1652 1736	1746D	S21	E38	.728	16305	24.5	88	-F							
BIGB	21	1618	1652	1830	S24	E41	.773	16305	24.8	132	-F	2	C	1652	80	1.1		
RAMY	21	1736	1736	1746	S18	E36	.688	16305	24.4	10	-F	3	C		21			
GRP77965	21	1633+0	1637	1641D	N15	E78	.973	16315	27.5	8	-F							
HOLL	21	1633	1637	1641	N16	E76	.964	16315	27.4	8	-F	3	C					
BIGB	21	1633	1647	1716	N15	E80	.980	16315	27.7	43	-N	2	C	1647	50			
966 BIGB	21	1714	1718	1732	N06	E08	.140	16298	22.3	18	-F	2	C	1718	20	.2		ZX
967 BIGB	21	1719	1735	1811	S09	E02	.279	16304	21.9	52	-F	2	C	1735	20	.2		ZX
968 BIGB	21	1724	1736	1758	N14	E80	.980	16315	27.7	34	-N	2	C	1736	10			ZX
969 BIGB	21	1809	1811	1818	N09	E17	.291	16298	23.0	9	-N	2	C	1811	20	.2		ZX
970 HOLL	21	1835	1836	1849	N16	E77	.969	16315	27.5	14	-F	3	C					ZX
971 RAMY	21	1845	1846	1851	N06	E09	.157	16298	22.5	6	-N	3	C		28			ZX
972 BIGB	21	1911	1912	1916	N17	E78	.972	16315	27.6	5	-N	2	C	1912	30			ZX
GRP77973	21	2006+1	2007+4 2017+4	2031	N06	E08	.140	16298	22.4	25	-F				30	.3	F	
BIGB	21	2006	2007	2015	N09	E09	.158	16298	22.5	9	-N	2	C	2007	30	.3		
PALE	21	2007	2021	2029	N05	E07	.127	16298	22.4	22	-F	2	C		34		F	
BIGB	21	2010	2011	2020	N04	E08	.149	16298	22.4	10	-N	2	C	2011	30	.3		
BIGB	21	2015	2017	2033	N08	E08	.139	16298	22.4	18	-F	2	C	2017	30	.3		
974 BIGB	21	2050	2052	2124	N15	E80	.980	16315	27.9	34	-N	2	C	2052	40			ZX
GRP77975	21	2110+0	2111+1	2130	N06	E07	.123	16298	22.4	20	-N				100	1.0		
RAMY	21	2110	2111	2124	N06	E08	.140	16298	22.5	14	-B	3	C		137		FDE	
BIGB	21	2110	2112	2130	N07	E07	.121	16298	22.4	20	-N	2	C	2112	80	.8		
PALE	21	2113E	2113U	2130	N05	E07	.127	16298	22.4	17D	-N	2	C		84		F	
GRP77976	21	2120+1	2124+4	2143	N27	E36	.636	16310	24.6	23	-N				50	.7		
BIGB	21	2120	2124	2143	N25	E36	.626	16310	24.6	23	-N	2	C	2124	50	.6		
CULG	21	2121E	2128	2143	N27	E38	.658	16310	24.7	22D	1B		C	2128	340	4.4		
RAMY	21	2121	2127	2141	N27	E34	.614	16310	24.4	20	-F	3	C		34			
GRP77977	21	2336+4	2345 2355+3	0030	N06	E05	.089	16298	22.4	54	1N				510	5.1	HIJL	
VORO	22	0013E		0031	N06	E04	.072	16298	22.3	18D	1N		P	0013	332	3.3	BEJL	
CULG	21	2336U	2355	0054D	N07	E04	.069	16298	22.3	78D	2N		P	2355	600	6.0	FLIT	
BIGB	21	2340	2356	0031	N06	E05	.085	16298	22.4	51	-B	2	C	2356	120	1.2		
MANI	21	2344E	2357	0010D	N06	E05	.089	16298	22.4	26D	1N				450	4.6		
MANI	21	2344E	2345	0010D	N06	E05	.089	16298	22.4	26D	-F	2	C		25			
YUNN	21	2351E	2358	0015	N06	E03	.055	16298	22.2	24D	2B		P		1085	10.9	EH	
PALE	21	2356E	2356U	0027D	N06	E06	.106	16298	22.4	31D	1B	3	C		473		F H	
978 VORO	22	0035	0037	0049	N12	E31	.514	16312	24.3	14	-N		C	0037	72	.8	D	ZX
GRP77979	22	0106	0108+4	0132	N06	E04	.072	16298	22.3	26	1N						HJL	
BIGB	22	0106	0108	0125E	N06	E04	.072	16298	22.3	19D	-N	1	P	0108	60	.6		
VORO	22	0108E		0132	N07	E05	.087	16298	22.4	24D	2F		P	0109	564	5.7	EHJL	
MANI	22	0110E	0112	0131D	N06	E04	.072	16298	22.3	21D	1N	2	C		250		FDE	
BIGB	22	0123E	0126	0126D	N07	W05	.087	16298	21.7	3D	-N	1	P	0126	30	.3		

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.		
GRP77980	22	0151>9	0222 0238+2	0320	N06	E03	.055	16298	22.3	89	1N				380	3.8	JKL	
PALE	22	0151	0238U	0245D	N06	E04	.072	16298	22.4	54D	1B	3	C		321		FDE	
VORO	22	0215	0238	0301D	N06	E03	.055	16298	22.3	46D	2N		C	0238	529	5.3	EJKL	
CULG	22	0215E	0222	0231D	N07	E03	.052	16298	22.3	16D	1N		P	0222	240	2.4		
YUNN	22	0217E	0217	0217D	N07	E03	.052	16298	22.3		1B		P		299	3.0		
MANI	22	0238E	0240U	0244D	N06	E04	.072	16298	22.4	6D	1N	2	C		300		FDE	
YUNN	22	0253E	0253	0320	N06	E02	.039	16298	22.3	27D	1N		P		456	4.6		
	22	0326	0331	NO FLARE PATROL														
981 CULG	22	0340E	0340E	0355	N17	W60	.860	16288	17.7	15D	-F		P	0340	50	1.0		ZX
982 CULG	22	0349	0400	0411	N12	E28	.470	16312	24.3	22	-N		C	0400	120	1.4	T	ZX
983 CULG	22	0609	0610D	0610D	N07	E03	.052	16298	22.5	1D	-N		P	0610	80	.8	FT	ZX
984 HTPR	22	0614E	0617	0630	N05	W01	.040	16298	22.2	16D	-F		C	0617	40	.4	E	ZX
985 YUNN	22	0630E	0630	0637	S28	W82	.998	16285	16.1	7D	?N		C		79			ZX
	IMP.1 NO : HTPR CATA																	
GRP77986	22	0646+4	0647+3 0700	0725	N04	W01	.056	16298	22.2	39	-N				50	.5	E	
HTPR	22	0646	0647	0654	N03	W01	.073	16298	22.2	8	-F		C	0647	50	.5	E	
CATA	22	0650	0650	0700D	N03	W01	.073	16298	22.2	10D	-B	1	P	0650	56	.6		
HTPR	22	0650	0700	0725	N07	W02	.035	16298	22.1	35	-F		C	0700	40	.4	E	
987 HTPR	22	0738	0744	0800	N06	W04	.072	16298	22.0	22	-F		C	0744	30	.3	E	ZX
GRP77988	22	0821	0822+2	0840	N06	W03	.055	16298	22.1	19	-N				120	1.2	E	
HTPR	22	0821	0824	0840	N06	W03	.055	16298	22.1	19	-N		C	0824	100	1.0	E	
MANI	22	0822E	0822U	0827D	N06	E01	.025	16298	22.4	5D	-N	3	C		150			
KHAR	22	0824E	0824	0830D	N04	W04	.088	16298	22.1	6D	-N		P				E	
989 HTPR	22	0941	0946	0956	N07	W02	.035	16298	22.3	15	-F		C	0946	10	.1		ZX
990 HTPR	22	1009	1011	1020	N07	W02	.035	16298	22.3	11	-F		C	1011	20	.2		ZX
991 HTPR	22	1055	1056	1108	N07	W03	.052	16298	22.2	13	-N		C	1056	60	.6	E	ZX
	22	1222	1226	NO FLARE PATROL														
992 HTPR	22	1249	1250	1300	S15	E19	.485	16305	24.0	11	-F		C	1250	30	.3	E	ZX
993 HTPR	22	1258	1300	1320	N06	W05	.089	16298	22.2	22	-F		C	1300	20	.2	E	ZX
GRP77994	22	1416+2	1420 1502+4	1517	N06	W06	.105	16298	22.1	61	-N				40	.4	E	
HTPR	22	1416E		1520	N05	W07	.126	16298	22.1	64D	-F		C	1501	30	.3	E	
LVOV	22	1418	1420	1443	N07	W06	.104	16298	22.1	25	-N		C	1418	150	1.6	C	
HOLL	22	1500	1502	1517	N06	W03	.055	16298	22.4	17	-N	3	C		54			
BIGB	22	1503	1506	1517	N07	W06	.104	16298	22.2	14	-N	1	C	1506	30	.3		
995 BIGB	22	1609	1622	1637	N03	W02	.079	16298	22.5	28	-F	1	C		100	1.0		ZX
996 HTPR	22	1611	1621	1626	S15	E37	.679	16314	25.4	15	-F		C	1621	20	.2		ZX
GRP77997	22	1728>9	1731 1743+1	1803	N06	W04	.072	16298	22.4	35	-N				50	.5	F	
BIGB	22	1728	1731	1738	N07	W04	.069	16298	22.4	10	-F	2	C	1731	30	.3		
BIGB	22	1729	1744	1813	N07	W06	.104	16298	22.3	44	-N	2	C	1744	50	.5		
HOLL	22	1742	1743	1753	N06	W04	.072	16298	22.4	11	-B	3	C		49		F	
998 HOLL	22	1803	1803	1809	S12	E35	.638	16314	25.4	6	-F	3	C		24			ZX
999 BIGB	22	1922	1923	1930	N39	E08	.541		23.4	8	-N	2	C		54	.6		ZX
GRP78000	22	1923+0	1924+1	1932	S15	E38	.690	16314	25.7	9	-N				25	.3		
HOLL	22	1923	1925	1931	S14	E38	.684	16314	25.7	8	-N	3	C		30			
BIGB	22	1923	1924	1933	S16	E38	.696	16314	25.7	10	-N	2	C	1924	20	.3		
GRP78001	22	2005+0	2011+0	2021	N05	W04	.078	16298	22.5	16	-F				25	.3		
PALE	22	2005	2011	2020	N05	W05	.094	16298	22.5	15	-F	3	C		20		DE	
BIGB	22	2005	2011	2021	N06	W04	.072	16298	22.5	16	-F	2	C		27	.3		

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78002	22	2123>9	2140+3	2221	S14	W45	.759	16295	19.5	58	-F						F	
CULG	22	2123	2140	2230	S13	W45	.755	16295	19.5	67	1F		C	2140	140	2.1	F	
BIGB	22	2140	2143	2211	S15	W45	.763	16295	19.5	31	-F	2	C	2143	50	.7		
GRP78003	22	2158+1	2202+2	2233	N02	W02	.095	16298	22.8	35	-N							
CULG	22	2158E	2202	2238	N03	W03	.088	16298	22.7	40D	-N		C	2202	80	.8		
BIGB	22	2159	2204	2227	N02	W02	.095	16298	22.8	28	-N	2	C	2204	30	.3		
GRP78004	22	2336+1	2337+1	2341	S15	E34	.647	16314	25.5	5	-N				50	.7	DH	
CULG	22	2336	2338	2341	S15	E33	.635	16314	25.5	5	-N		C	2338	60	.8		
VORO	22	2337	2337	2340	S15	E35	.658	16314	25.6	3	-N		C	2337	36	.4	DH	
5 CULG	22	2351	2355	0001	S27	E76	.987	16322	28.7	10	-F		C	2355	50			ZX
6 PALE	22 IMP.1	2356 NO ! BIGB	2356	0000D HOLL	N06 VORO	E06 CULG	.105 MITK	16298	23.4	40	?B	3	C		473		FDE	ZX
7 BIGB	23	0002	0006	00190	S03	W10	.244	16298	22.3	170	-N	2	C		25	.3	D	ZX
GRP78008	23	0002+1	0005 0023	0056	N10	W13	.228	16298	22.0	54	-F						J	
CULG	23	0002	0023U	0105	N15	W13	.259	16298	22.0	63	-F		C	0023	80	.8		
VORO	23	0003	0005	0026	N06	W15	.258	16298	21.9	23	-N		C	0005	81	.8	DJ	
VORO	23	0037	0039	0047	N06	W10	.173	16298	22.3	10	-F		C	0039	45	.5	DJ	
GRP78009	23	0030+2	0035+0	0055	S13	W44	.744	16295	19.7	25	-N				120	1.8	EJ	
CULG	23	0030	0035	0059	S13	W45	.755	16295	19.6	29	-N		C	0035	100	1.6		
VORO	23	0032	0035	0051	S14	W44	.749	16295	19.7	19	1F		C	0035	152	2.2	EJ	
10 CULG	23	0101	0107	0114	N30	E60	.871		27.5	13	-F		C	0107	40	.8		ZX
GRP78011	23	0117+1	0120+2	0133	S12	E11	.374	16305	23.9	16	-N				80	.9	E	
CULG	23	0117	0122	0136	S12	E10	.366	16305	23.8	19	-N		C	0122	70	.8		
VORO	23	0118	0120	0130	S13	E12	.396	16305	24.0	12	-N		C	0120	90	.9	E	
GRP78012	23	0130+4	0134+2	0156	N07	W10	.172	16298	22.3	26	-N				120	1.2		
CULG	23	0130	0136	0201	N07	W10	.172	16298	22.3	31	-N		C	0136	120	1.2		
VORO	23	0131	0135	0151	N07	W10	.172	16298	22.3	20	-B		C	0135	143	1.4	E	
PALE	23	0134	0134	01470	N05	W07	.126	16298	22.5	130	-N	3	C		53		F	
GRP78013	23	0147+2	0150+0	0211	N33	W55	.839	16291	18.9	24	-N				90	1.7	GJ	
CULG	23	0147	0150	0224	N33	W55	.839	16291	18.9	37	-N		C	0150	100	1.8	G	
VORO	23	0149	0150	0157	N34	W55	.841	16291	19.0	8	-N		C	0150	81	1.5	GJ	
14 VORO	23	0158	0159	0202	N15	W39	.630	16319	20.2	4	-N		C	0159	72	.9	DGJ	ZX
GRP78015	23	0159+3	0203+3	0252	N05	W10	.176	16298	22.3	53	1N						F	
CULG	23	0159	0205	0252	N03	W10	.186	16298	22.3	53	1N	*	C	0205	230	2.3	F	
VORO	23	0202	0203	02300	N06	W17	.291	16298	21.8	28D	1B	*	C	0204	376	3.8	E	
MANI	23	0202E	0206U	0212D	N05	W07	.126	16298	22.6	10D	-F	*	C		120		F	
16 CULG	23	0222	0225	0227	N30	E59	.864		27.5	5	-F		C	0225	40	.8		ZX
17 CULG	23	0504	0512	0528	S12	E10	.366	16305	24.0	24	-N		C	0512	140	1.5	L	ZX
GRP78018	23	0618	0623	0643	N06	W11	.190	16298	22.4	25	-B						FU	
ATHN	23	0618	0623	0643	N08	W11	.190	16298	22.4	25	-B	3	C		143		U F	
TACH	23	0626E		06310	N05	W11	.193	16298	22.4	5D	1N		C	0626	398	4.1	B	
19 ATHN	23	0830	0832	0849	N07	W13	.223	16298	22.4	19	-B	3	C		95		DE	ZX
20 KHAR	23	0910E		09280	N06	W14	.241	16298	22.3	18D	-F		P	0913	130	1.5	ET	ZX
21 KHAR	23	1002E		10190	N04	W14	.246	16298	22.4	17D	-F		P	1005	150	1.6	ET	ZX
GRP78022	23	1022+1	1025+0	1035	N05	W14	.243	16298	22.4	13	-N						E	
KHAR	23	1022E	1025	10350	N04	W15	.263	16298	22.3	13D	-N		P	1025	150	1.6	ET	
ATHN	23	1023	1025	1035	N07	W14	.240	16298	22.4	12	-B	3	C		64		DE	
23 KHAR	23	1050E	1053	11180	N04	W14	.246	16298	22.4	28D	-N		P	1053	150	1.6	ET	ZX
24 KHAR	23	1109E		11240	S13	E08	.367	16305	24.1	15D	-N		P	1115	120	1.3	E	ZX
	23	1124	1130	NO FLARE PATROL														
25 KHAR	23	1138E		11330	N11	E85	.994	16325	29.9	3D	-F		P				D	ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
GRP78026	23	1157E		1215	N04	W15	.263	16298	22.4	18	-N						E
KHAR	23	1157E		1216D	N04	W16	.279	16298	22.3	19D	-N		P	1157	120	1.3	ET
HUAN	23	1205E		1214	N05	W15	.260	16298	22.4	9D	-N	1	P	1206	40	.4	E
	23	1236	1327	NO FLARE PATROL													
27 HOLL	23	1402	1412	1433	S16	E27	.578	16314	25.6	31	-F	3	C		29		ZX
GRP78028	23	1623+8	1633+6	1648	S12	E04	.333	16305	24.0	25	-B						EZ
BIGB	23	1623	1633	1647	S12	E05	.337	16305	24.1	24	-B	1	C	1633	160	1.7	
HOLL	23	1630	1639	1648	S12	E04	.333	16305	24.0	18	1B	3	C		294		ZDE
HUAN	23	1631		1645D	S13	E04	.349	16305	24.0	14D	-N	2	P	1633	60	.6	E
GRP78029	23	1639+2	1646+1	1658D	N07	W17	.290	16298	22.4	19	-N				45	.5	
BIGB	23	1639	1646	1728	N08	W18	.307	16298	22.3	49	-N	2	C	1646	40	.4	
HOLL	23	1641	1647	1658	N06	W17	.291	16298	22.4	17	-N	3	C		52		
30 BIGB	23	1648	1649	1702	N21	W17	.368	16307	22.4	14	-N	2	C	1649	40	.4	ZX
31 HOLL	23	1748	1748	1804	N21	W17	.368	16307	22.5	16	-F	3	C		34		ZX
32 PALE	23	1755	1755	1758	N18	E74	.955	16325	29.3	3	-F	3	C		14		F ZX
33 HOLL	23	1946	2001	2032	S14	E23	.516	16314	25.5	46	-F	3	C		28		F ZX
34 BIGB	23	2041	2048	2135	N08	W18	.307	16298	22.5	54	-F	2	C	2048	40	.4	ZX
35 HOLL	23	2051	2054	2059	S13	E22	.495	16314	25.5	8	-F	3	C		22		ZX
36 CULG	23	2159	2202	2206	N08	E38	.611	16320	26.8	7	-F		C	2202	40	.5	ZX
GRP78037	23	2223+8	224E+6	2309	N08	W21	.356	16298	22.4	46	-N				110	1.2	FU
CULG	23	2223	2252	2317	N08	W23	.388	16298	22.2	54	-N		C	2252	130	1.4	
HOLL	23	2231	224E	2311	N08	W22	.372	16298	22.3	40	-B	3	C		123		U F
BIGB	23	2241	2248	2307	N08	W21	.356	16298	22.4	26	-N	3	C	2248	50	.6	
PALE	23	2241	2251	2306	N06	W21	.357	16298	22.4	25	-N	3	C		109		U F
38 HOLL	23	2239	2244	2256	N13	W46	.738	16319	20.3	17	-F	3	C		17		ZX
39 CULG	23	2345	240E	0117U	N30	E10	.420	16310	24.7	92D	-F		C	2406	120	1.3	SF ZX
GRP78040	24	0052	0157	0218	N06	W22	.373	16298	22.4	86	-N						K
CULG	24	0052	0157	0226	N08	W24	.404	16298	22.2	94	1N		C	0157	300	3.3	K
PALE	24	0131E	0131U	0210	N05	W20	.342	16298	22.6	39D	-F	3	C		62		DE
41 CULG	24	0135	0142	0247	S15	W02	.376	16305	23.9	72	1B		C	0142	350	3.8	U ZX
42 CULG	24	0147	0155	0204	N15	W50	.762	16319	20.3	17	-F		C	0155	70	1.1	ZX
43 CULG	24	0151	0152	0215	N27	W45	.733		20.7	24	-F		C	0152	50	.7	G ZX
44 CULG	24	0245	025E	0340	N27	E07	.360	16310	24.6	55	-F		C	025E	140	1.5	F ZX
45 CULG	24	0332	0341	0359	N07	W25	.420	16298	22.3	27	-F		C	0341	140	1.5	ZX
GRP78046	24	0506	0509+1	0548	N06	W24	.405	16298	22.4	42	1B				370	4.1	L
CULG	24	0506	0510	0554	N07	W25	.420	16298	22.3	48	1B		C	0510	430	4.7	L
TACH	24	0507E	0509	0542	N05	W24	.406	16298	22.4	35D	1B		C	0509	318	3.6	C
47 CULG	24	0530	0535	0606	S29	E55	.899	16322	28.4	3E	-N		C	0535	60	1.4	ZX
48 CULG	24	0615	0619	0626	S18	E02	.424	16305	24.4	11	-F		C	0615	50	.5	ZX
49 CULG	24	0656	065E	0709	N12	W18	.316	16298	22.9	13	-N		C	065E	120	1.3	H ZX
50 ATHN	24	0822	0825	0844	N21	W39	.645		21.4	22	-B	1		0825	131	1.6	ZX
51 TELV	24	0956	0958	1022D	N10	W25	.421	16298	22.5	26D	-B	3			8		ZX
52 TELV	24	1009	1010	1016	N07	W35	.570	16298	21.8	7	-F	3			8	.1	ZX
53 ATHN	24	1016	1020	1038	N18	E29	.505		26.6	22	-B	1		1020	147	1.7	ZX
54 TELV	24	1051	1052	1107	N09	W30	.496	16298	22.2	16	-N	3			13	.2	ZX
55 TELV	24	1120	1121	1216	N08	E28	.466	16320	26.6	56	-F	3			12	.1	ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX HER. DIST.	CENTRAL DISTANCE	HEIMATH PLAGE REGION	CMP. DAY	MIN.		CONG	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
56 TELV	24	1203	1204	1204D	S18	W10	.452	16305	23.8	1D	-N	3			5		K	ZX
57 TELV	24	1213	1214	1224	S18	W10	.452	16305	23.8	11	-N	3			20	.2		ZX
58 TELV	24	1214	1215	1218	N08	W30	.496	16298	22.3	4	-B	3			20	.2		ZX
59 TELV	24	1217	1219	1219D	N09	E26	.436	16320	26.5	2D	-N	3			40	.4	U	ZX
60 HUAN	24	1254		1300	N06	W31	.512	16298	22.2	6	-F	1	C				D	ZX
GRP78061	24	1406+5	1413+0	1436	N13	W57	.832	16319	20.3	30	-N				100	1.8		
HOLL	24	1406	1413	1451	N13	W57	.832	16319	20.3	45	-N	2	C		109		F	
RAMY	24	1410	1413	1436	N12	W57	.832	16319	20.3	2E	-N	3	C		90			
HUAN	24	1411		1423	N13	W58	.842	16319	20.2	12	-F	1	C				E	
62 HUAN	24	1447	1451	1454	N18	E36	.598	16315	27.3	7	-F	1	C	1451	20	.2	D	ZX
63 HOLL	24	1454	1515	1527	N13	W58	.842	16319	20.3	33	-F	3	C		33			ZX
64 HOLL	24	1545	1548	1556	S24	E50	.846	16322	28.4	11	-F	3	C		24			ZX
65 RAMY	24	1617	1619	1625	N06	W30	.497	16298	22.4	8	-F	3	C		23			ZX
66 HUAN	24	1637		1639	N19	E33	.563	16315	27.2	2	-F	1	C				D	ZX
67 HUAN	24	1659		1705	N19	E32	.549	16315	27.1	6	-F	1	C					ZX
GRP78068	24	1743+2	1750+3	1813	N06	W32	.527	16298	22.3	30	-N				90	1.1	FU	
PALE	24	1743	1750U	1814D	N05	W30	.498	16298	22.5	31D	-N	3	C		107		F	
HOLL	24	1744	1750	1812	N06	W32	.527	16298	22.3	28	-B	3	C		65		U F	
HUAN	24	1744	1753	1805	N06	W34	.556	16298	22.2	21	-N	*	C	1753	25	.3	D	
RAMY	24	1745	1750	1813	N07	W33	.541	16298	22.3	28	-B	3	C		110		F	
69 HUAN	24	1744		1749	N19	E65	.900	16325	29.6	5	-F	1	C	1746	20	.4	D	ZX
70 PALE	24	1750	1800U	1803	N13	W59	.851	16319	20.3	13	-F	3	C		31		F	ZX
71 RAMY	24	1853	1854	1901D	N06	W31	.512	16298	22.5	8D	-F	3	C		26			ZX
	24	1909	1910	NO FLARE PATROL														
72 HOLL	24	2036	2038	2042	N22	W31	.551	16307	22.5	6	-F	3	C		42			ZX
73 HOLL	24	2038	2052	2058	S20	E67	.946	16324	29.9	20	-F	3	C		16			ZX
74 CULG	24	2109	2113	2127	S16	W85	.999	16295	18.5	18	?N		C	2113	60			ZX
	IMP.1 NO 1 HOLL PALE																	
75 CULG	24	2132	2142	2149	S27	W85	1.000		18.5	17	-F		C	2142	20			ZX
76 CULG	24	2139	2147	2206	S15	E06	.387	16314	25.4	27	-F		C	2147	40	.4		ZX
77 HOLL	24	2149	2150	2202	N17	E62	.877	16325	29.6	13	-F	3	C		19			ZX
78 HOLL	24	2310	2351	0011	N07	W36	.584	16298	22.3	61	-F	3	C		48			ZX
79 HOLL	25	0013	0024	0033D	N01	W32	.537	16298	22.6	20D	-N	2	C		52			ZX
80 MANI	25	0328E	0329	0345D	N20	E34	.560	16315	27.7	17D	-N	3	C		80			ZX
GRP78081	25	0615E	0620	0635	N25	E90	.999	16329	1.0	20	1N							
CATA	25	0615E	0620	0630D	N25	E90	.999	16329	2.0	15D	1N	2	P	0620	112			
HTPR	25	0626E		0635	N25	E90	.999	16329	2.0	9D	-F		C	0626	40			
GRP78082	25	0818+7	0823+7	0855	N22	W39	.649	16307	22.4	37	-B				130	1.7	E	
KHAR	25	0818E	0825	0906D	N22	W39	.649	16307	22.4	48D	-N		P	0825	110	1.5		
HTPR	25	0819	0823	0850	N22	W38	.637	16307	22.5	31	-B		C	0823	130	1.6	E	
ATHN	25	0822	0825	0844	N21	W39	.646	16307	22.4	22	-B	2	C		127		DE	
PURP	25	0823	0830	0859	N21	W40	.658	16307	22.3	36	1B		C					
CATA	25	0825	0830	0830D	N22	W38	.637	16307	22.5	5D	1B	2	P	0830	168	2.2		
83 KHAR	25	0843E	0846	0900D	N06	W43	.678	16298	22.1	17D	-F		P					ZX
84 KHAR	25	0906E	0910	0936D	N21	E27	.495	16315	27.4	30D	-F		P				E	ZX
85 TELV	25	0928	0929	0939	N04	W45	.706	16298	22.0	11	-N	3			8	.1		ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq Deg.		
86 HTPR	25	0930	0933	0945	N22	W38	.637	16307	22.5	15	-F		C	0933	20	.3	E	ZX
GRP78087	25	1009+7	1013+7	1038	N20	E28	.502	16315	27.5	29	1B				180	2.1	E	
HTPR	25	1009	1015	1030	N21	E28	.507	16315	27.5	21	-B		C	1015	180	2.0	E	
KHAR	25	1010E	1013	1057D	N20	E27	.488	16315	27.4	47D	1N		P	1017	330	3.9	E	
ATHN	25	1016	1020	1038	N18	E29	.505	16315	27.6	22	-B	2	C		143		F	
GRP78088	25	1051	1052	1101	N03	W48	.743	16298	21.9	10	-N						D	
TELV	25	1051	1052	1101	N03	W47	.731	16298	21.9	10	-N	3			6			
KHAR	25	1053E	1053	1057D	N03	W49	.754	16298	21.8	4D	-F		P				D	
GRP78089	25	1051	1055 1119+3	1147	N22	W40	.661	16307	22.5	56	-F						EK	
HTPR	25	1051	1055	1110	N22	W39	.649	16307	22.5	19	-F		C	1055	60	.8	EK	
KHAR	25	1057E	1122	1152D	N22	W41	.673	16307	22.4	55D	-F		P				E	
HTPR	25	1115	1119	1130	N22	W39	.649	16307	22.5	15	-F		C	1119	50	.7	E	
RAMY	25	1143E	1143U	1147D	N21	W40	.658	16307	22.5	4D	-F	2	C		117			
GRP78090	25	1106	1113 1122	1205	N15	E56	.823	16325	29.7	59	1N						EKU	
HTPR	25	1106	1113	1200	N13	E55	.813	16325	29.6	54	1B		C	1113	220	3.8	EKU	
KHAR	25	1107E	1122	1210D	N15	E57	.833	16325	29.7	63D	2N		P	1122	385	7.5	E	
RAMY	25	1143E	1143U	1147D	N18	E56	.825	16325	29.7	4D	-N	2	C		142		F	
91 HTPR	25	1204	1206	1212	N22	W39	.649	16307	22.6	8	-F		C	1206	10	.1		ZX
92 TELV	25	1209	1209	1213	N01	W49	.757	16298	21.8	4	-N	3			6	.1		ZX
93 HTPR	25	1228E	1234	1244	N22	W38	.637	16307	22.7	16D	-F		C	1234	40	.5		ZX
GRP78094	25	1238+1	1240+1	1251	N03	W46	.719	16298	22.1	13	-F				25	.4		
HTPR	25	1238	1241	1249	N05	W47	.729	16298	22.0	11	-F		C	1241	30	.4		
TELV	25	1239	1240	1253	N02	W46	.721	16298	22.1	14	-N	3			16	.2		
GRP78095	25	1250>9	1311+1	1334	N22	E90	.999	16329	1.3	44	-N						AEGK	
LVOV	25	1250	1311	1335	N22	E90	.999	16329	2.3	45	1F	*	C	1311	100		GA	
HTPR	25	1309	1312	1332	N23	E90	.999	16329	2.3	23	-N	*	C	1312	30		AEK	
96 HTPR	25	1251	1252	1256	N22	W38	.637	16307	22.7	5	-F		C	1252	40	.5	E	ZX
97 RAMY	25	1338	1342	1350	N06	W42	.666	16298	22.4	12	-F	3	C		50			ZX
98 HOLL	25	1406	1414	1417	N22	W42	.684	16307	22.4	11	-F	3	C		18			ZX
99 HOLL	25	1509	1522	1537	N24	E47	.744	16330	29.2	28	-F	3	C		32			ZX
GRP78100	25	1512+0	1513+0	1518	N21	E26	.482	16315	27.6	6	-F				20	.2	E	
HTPR	25	1512	1513	1516	N21	E26	.482	16315	27.6	4	-F		C	1513	20	.2	E	
HOLL	25	1512	1513	1519	N21	E26	.482	16315	27.6	7	-F	3	C		23			
101 HTPR	25	1604	1608	1616	N18	E51	.775	16325	29.5	12	-F		C	1608	20	.3		ZX
102 BIGB	25	1811	1812	1835	N15	W50	.762	16307	22.0	24	-N	2	C	1812	90	1.4		ZX
GRP78103	25	1925+1	1927+1	1947	N19	E50	.766	16325	29.6	22	-N				60	1.0	E	
HUAN	25	1925	1928	1938	N19	E50	.766	16325	29.6	13	-N	1	C	1928	35	.5	E	
HOLL	25	1925	1928	1956	N20	E49	.757	16325	29.5	31	-N	3	C		94			
BIGB	25	1926	1927	1935D	N18	E50	.765	16325	29.6	9D	-N	2	P	1927	40	.6		
GRP78104	25	1925+6	1931+0	1944	N19	E24	.442	16315	27.6	19	-F				50	.6	E	
HOLL	25	1925	1931	1946	N19	E21	.402	16315	27.4	21	-N	3	C		70			
BIGB	25	1929	1931	1935D	N20	E25	.462	16315	27.7	6D	-F	2	P	1931	40	.5		
HUAN	25	1931		1942	N19	E24	.442	16315	27.6	11	-F	1	C				E	
GRP78105	25	1955+9	1956+0	2007	N23	E87	.995	16329	1.4	12	-N				50		AE	
HUAN	25	1955	1956	2000	N23	E87	.995	16329	2.4	5	-N	1	C	1956	40		E	
BIGB	25	1955	1956	2007	N22	E86	.994	16329	2.3	12	-B	2	C	1956	70		A	
HOLL	25	2004	2009	2016	N23	E87	.995	16329	2.4	12	-F	3	C					
GRP78106	25	2034+3	2042+3	2108	N05	W52	.785	16298	22.0	34	1N				180	2.9	FHLU	
CULG	25	2034E	2043U	2116	N08	W52	.783	16298	22.0	42D	2N		P	2043	460	6.9	HL	
BIGB	25	2036	2043	2109	N05	W53	.796	16298	21.9	33	-B	2	C	2043	140	2.4		
HOLL	25	2036	2042	2107	N05	W52	.785	16298	22.0	31	1B	3	C		228		U F	
HOLL	25	2036	2038	2040D	N06	W45	.703	16298	22.5	4D	-B	3	C		148		U F	
HUAN	25	2037	2045	2054	N04	W52	.786	16298	22.0	17	-N	1	C	2045	45	.7		
107 HOLL	25	2037	2043	2100	N14	W74	.956	16319	20.3	23	-N	3	C		53			ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
108 BIGB	25	2122	2124	2129	N22	E88	.997	16329	2.5	7	-N	2	C	2124	20			ZX
GRP78109	25	2128+2	2134+3	2147	N19	E48	.745	16325	29.5	19	-N				80	1.2		
CULG	25	2128	2137U	2143	N18	E48	.743	16325	29.5	15	-F		C	2137	120	1.8		
HOLL	25	2129	2134	2152	N21	E47	.737	16325	29.4	23	-B	3	C		75			
BIGB	25	2130	2137	2147	N19	E48	.745	16325	29.5	17	-N	2	C	2137	40	.6		
110 CULG	25	2246	2250	2306	S42	W19	.776	16306	24.8	20	-F		C	2250	70	1.1	L	ZX
GRP78111	25	2355+9	0005+8	0028	S21	E54	.865	16324	30.8	33	-F						F	
BIGB	26	0004	0005	0028	S22	E56	.883	16324	30.2	24	-F	2	C	0005	20	.4		
CULG	25	2355	2405	0028	S21	E52	.850	16324	29.9	33	-N		C	2405	80	1.6	F	
112 CULG	26	0000	0042	0120	S27	W35	.743	16306	23.4	80	?F	*	C	0042	250	3.8	F	ZX
	IMP.1 NO 1 BIGB			YUNN	PURP													
GRP78113	26	0000+3	0005+1	0025	N14	E58	.761	16325	29.7	25	-F				70	1.1	L	
CULG	26	0000	0005	0026	N14	E48	.739	16325	29.6	26	-F		C	0005	80	1.2		
VORO	26	0002	0005	0017	N15	E50	.762	16325	29.8	15	-F		C	0005	90	1.3	DL	
BIGB	26	0003	0006	0024	N14	E51	.772	16325	29.8	21	-F	2	C	0006	50	.8		
PALE	26	0015E	0015U	0035D	N17	E52	.785	16325	29.9	20D	-F	2	C		20		F	
114 CULG	26	0018	0018	0024	N14	E35	.575	16318	28.6	6	-F		C	0018	40	.5		ZX
GRP78115	26	0211+1	0213+2	0223	N05	W53	.796	16298	22.1	12	-F							
CULG	26	0211	0215	0223	N06	W54	.805	16298	22.0	12	-N		C	0215	80	1.4		
PALE	26	0212	0213	0222	N04	W52	.786	16298	22.2	10	-F	2	C		20		DE	
116 CULG	26	0318	0324	0329	N19	E49	.756	16325	29.8	11	-F		C	0324	60	.9	L	ZX
117 CULG	26	0402	0405	0414	N05	W56	.826	16298	22.0	12	-F		C	0405	40	.7		ZX
118 CULG	26	0415	0417	0425	S23	E51	.849	16324	30.0	10	-F		C	0417	90	1.8		ZX
119 CULG	26	0450	0454	0458	N29	W18	.467	16310	24.9	8	-F		C	0454	70	.8		ZX
120 CULG	26	0509	0511	0522	N14	E46	.716	16325	29.7	13	-F		C	0511	60	.9		ZX
121 CULG	26	0513	0514	0517	S25	E51	.857	16324	30.0	4	-F		C	0514	50	1.0		ZX
122 CULG	26	0541	0544	0549	N16	E46	.718	16325	29.7	8	-F		C	0544	80	1.2	L	ZX
123 TACH	26	0604	0608	0614	N05	W55	.816	16298	22.1	10	?F		C	0608	220	3.9	EL	ZX
	IMP.1 NO 1 PURP			CULG	HTPR													
GRP78124	26	0651>9	0657 0712	0725	S23	E50	.842	16324	30.0	34	-F						EK	
HTPR	26	0651	0657	0716	S23	E49	.834	16324	30.0	25	-F		C	0657	10	.2		
TACH	26	0701	0712	0725	S23	E52	.857	16324	30.2	24	1F		C	0712	176	3.6	E	
ISTA	26	0716E		0751	S21	E50	.834	16324	30.1	35D	-N		V				K	
GRP78125	26	0704+2	0706+1	0712	N16	E12	.256	16315	27.2	8	-F						D	
TACH	26	0704	0706	0714	N17	E12	.266	16315	27.2	10	-F		C	0706	63	.6	D	
HTPR	26	0706	0707	0709	N16	E12	.256	16315	27.2	3	-F		C	0707	10	.1		
126 ISTA	26	0716E	0725	0736	N16	E17	.325	16315	27.6	20D	-N		V				D	ZX
127 ISTA	26	0728		0743	N16	E45	.706	16325	29.7	15	-F		V				DK	ZX
GRP78128	26	0759+3	0802+4	0821	N15	E16	.303	16315	27.5	22	-F						D	
HTPR	26	0759	0802	0820	N15	E16	.303	16315	27.5	21	-F		C	0802	20	.2		
ISTA	26	0802	0806	0821	N16	E17	.325	16315	27.6	19	-N		V				D	
GRP78129	26	0843		0857	S12	W14	.399	16314	25.3	14	-N						E	
ISTA	26	0843		0849	S11	W14	.386	16314	25.3	6	-N		V				E	
TELV	26	0848E		0905	S14	W14	.425	16314	25.3	17D	-B	2	P					
GRP78130	26	0846+1	0850+1 0905	0915	N11	E07	.140	16320	26.9	29	1N						I	
ISTA	26	0846	0850	0908	N12	E09	.177	16320	27.0	22	1B		V				F	
HTPR	26	0847	0851	0915	N10	E06	.116	16320	26.8	28	-N		C	0851	60	.6	EI	
CATA	26	0855E	0905	0925D	N11	E07	.140	16320	26.9	30D	1N	1	P	0905	196	2.0		
GRP78131	26	0918+3	0920+2	0935D	N27	W20	.464	16310	24.9	17	-F				25	.3	E	
TELV	26	0918E	0920	1035	N27	W20	.464	16310	24.9	77D	-F	2	P		20	.2		
HTPR	26	0921	0922	0935	N28	W20	.474	16310	24.9	14	-F		C	0922	30	.3	E	

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
132 HTPR	26	1017	1018	1022	S13	W17	.440	16314	25.2	5	-F		C	1018	20	.2	E	ZX
133 HTPR	26	1040	1048	1109	N15	E15	.289	16315	27.6	29	-F		C	1048	20	.2	E	ZX
GRP78134	26	1108+7	1109	1143	N25	W24	.488	16310	24.7	35	-B						FW	
TELV	26	1108E		1151D	N25	W26	.511	16310	24.5	43D	-N	2	P					
HTPR	26	1108	1109	1135	N25	W22	.465	16310	24.8	27	-B		C	1109	80	.9	E	
TELV	26	1108E		1151D	N25	W23	.477	16310	24.7	43D	-N	2	P					
TELV	26	1109		1151D	N23	W30	.545	16310	24.2	42D	-B	2	P				W	
CATA	26	1115	1120	1120D	N25	W24	.488	16310	24.7	5D	-B	1	P	1120	112	1.3		
135 HTPR	26	1148	1152	1210	N04	W55	.817	16298	22.4	22	-F		C	1152	30	.5	E	ZX
	26	1242	1246	NO FLARE PATROL														
GRP78136	26	1245+2	1255+9 1324	1355	S19	E44	.772	16324	29.8	70	-N				120	1.9	K	
RAMY	26	1245	1259	1402	S25	E45	.811	16324	29.9	77	-N	3	C		130			
HTPR	26	1247	1255	1400	S20	E44	.777	16324	29.8	73	-N		C	1255	80	1.0	EK	
LVOV	26	1302	1304	1313	S17	E42	.742	16324	29.7	11	1N		C	1304	150	3.8	D	
HOLL	26	1322E	1324U	1349	S19	E47	.799	16324	30.1	27D	-N	2	C		60			
137 HTPR	26	1316	1316	1319	N16	E09	.219	16315	27.2	3	-F		C	1316	20	.2		ZX
138 HTPR	26	1336	1337	1340	N16	E09	.219	16315	27.2	4	-N		C	1337	30	.3		ZX
GRP78139	26	1346+0	1347+0	1351	N16	E08	.208	16315	27.2	5	-N				35	.4	D	
HTPR	26	1346	1347	1353	N16	E09	.219	16315	27.2	7	-N		C	1347	50	.5		
HUAN	26	1346	1347	1349	N17	E08	.221	16315	27.2	3	-N	2	C	1347	15	.2	D	
GRP78140	26	1547+0	1548+0	1553	N06	W57	.835	16298	22.4	6	-N				30	.6		
HOLL	26	1547	1548	1554	N06	W56	.825	16298	22.5	7	-N	3	C		24			
BIGB	26	1547	1548	1552	N06	W58	.844	16298	22.3	5	-N	2	C	1548	40	.8		
141 HTPR	26	1618	1621	1625	S27	E90	1.002		3.4	7	-F		C	1621	20		A	ZX
GRP78142	26	1635+1	1636+2	1646	N19	W57	.835	16307	22.4	11	-F				20	.4		
BIGB	26	1635	1638	1646	N19	W58	.844	16307	22.3	11	-N	2	C	1638	20	.4		
RAMY	26	1636	1636	1645	N19	W56	.826	16307	22.5	9	-F	3	C		16			
GRP78143	26	1855+2	1858+1	1916	N23	E72	.944	16329	1.2	21	-F				30			
BIGB	26	1855	1854	1917	N23	E73	.949	16329	2.3	22	-N	2	C	1858	30			
HOLL	26	1856	1859	1916	N24	E71	.939	16329	2.1	20	-F	3	C		29			
PALE	26	1857	1858	1905	N23	E72	.944	16329	2.2	8	-F	3	C		17			
GRP78144	26	1901+1	1903+1	1908	N16	E05	.179	16315	27.2	7	-N				25	.3	D	
HUAN	26	1901	1904	1908	N16	E05	.179	16315	27.2	7	-N	1	C	1904	20	.2	D	
BIGB	26	1902	1903	1907	N16	E06	.187	16315	27.2	5	-N	2	C	1903	30	.3		
145 BIGB	26	1936	1942	1954	N06	W58	.844	16298	22.5	18	-N	2	C	1942	40	.8		ZX
146 HUAN	26	2012	2013	2014	N16	E05	.179	16315	27.2	2	-F	1	C				D	ZX
GRP78147	26	2014+0	2014+2	2031	N28	W26	.536	16310	24.9	17	-F				25	.3	F	
BIGB	26	2014	2016	2036	N29	W26	.544	16310	24.9	22	-N	2	C	2016	30	.3		
HOLL	26	2014	2014	2025	N28	W26	.536	16310	24.9	11	-F	3	C		23		F	
148 HUAN	26	2019		2026	N16	E05	.179	16315	27.2	7	-F	1	C				D	ZX
149 BIGB	26	2020	2021	2029	N17	W15	.305	16313	25.7	9	-N	2	C	2021	30	.3		ZX
GRP78150	26	2057+1	2105 2115+5	2206D	N03	W60	.865	16298	22.4	69	1N						FILUY	
HOLL	26	2057	2105	2256	N01	W57	.840	16298	22.6	119	1N	3	C		268		U U	
CULG	26	2058E	2115	2205D	N04	W63	.889	16298	22.1	67D	2N		P	2115	540	11.0	UYLI	
BIGB	26	2058	2117	2201D	N05	W62	.880	16298	22.2	63D	1B	2	P	2117	120	2.6		
PALE	26	2103E	2120	2206	N03	W58	.847	16298	22.5	63D	1N	3	C		199		U F	
151 PALE	26	2125	2127	2136	S21	E41	.755	16324	30.0	11	-F	3	C		34		DE	ZX
GRP78152	26	2304+0	2305+0	2325	N20	E06	.247	16315	27.4	21	-N				80	.8	EK	
CULG	26	2304	2305	2312D	N21	E07	.269	16315	27.5	8D	-N		P	2305	70	.7		
VORO	26	2304	2305	2325	N20	E06	.247	16315	27.4	21	-N		C	2305	99	1.0	EK	
153 HOLL	26	2323	2325	2334	S21	E42	.764	16324	30.1	11	-F	3	C		38			ZX
154 HOLL	26	2343	2345	2358	S24	E21	.603	16322	28.6	15	-F	3	C		43			ZX

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78155	27	0213+5	0220+5	0252	N06	W65	.983	16298	22.2	39	-F				70	1.7	F	
CULG	27	0213	0225	0254	N06	W65	.983	16298	22.2	41	-N		C	0225	110		F	
PALE	27	0218	0221	0252	N06	W64	.895	16298	22.3	34	-N	3	C		53		F	
WORO	27	0218	0220	0222D	N06	W67	.917	16298	22.1	4D	1F		C	0220	90		E	
MANI	27	0224E	0224U	0235	N06	W66	.910	16298	22.2	11D	-F	3	C		25			
156 CULG	27	0257	0310	0319	S26	E17	.599	16322	28.4	22	-F		C	0310	130	1.6		ZX
157 PALE	27	0303	0313	0317D	N21	E20	.406	16318	28.6	14D	-F	3	C		33		F	ZX
158 CULG	27	0306	0312U	0325	N20	E05	.241	16315	27.5	19	-F		C	0312	60	.6		ZX
GRP78159	27	0652+0	0656+4	0732D	S23	E41	.766	16324	30.4	40	-F						J	
ABST	27	0652	0700	0732	S22	E42	.769	16324	30.4	40	-F		C	0700	87	1.4	DJ	
HTPR	27	0652	0656	0830	S24	E40	.763	16324	30.3	98	-F		C	0656	20	.3	E	
160 ABST	27	0702	0704	0710	N05	W66	.911	16298	22.3	8	?N		C	0704	87		DJ	ZX
	IMP.1	NO I	PURP	HTPR	CATA	MONT												
GRP78161	27	0712+8	0722+3	0746	S27	E90	1.001	16334	3.0	34	1N				160		AD	
HTPR	27	0712	0723	0750	S30	E90	1.002	16334	4.1	38	1N		C	0723	120		A	
MONT	27	0715	0722	0742	S28	E90	1.002	16334	4.1	27	1N		C	0722	180			
ABST	27	0718	0723	0737	S27	E90	1.001	16334	4.1	19	2N		P	0723	175		AD	
CATA	27	0720	0725	0800	S27	E90	1.001	16334	4.1	40	2N	2	C	0725	168		A	
GRP78162	27	0731+3	0733+3	0739	N15	W70	.933	16298	22.1	8	-F				30		D	
TELV	27	0731	0733	0740	N15	W70	.933	16298	22.1	9	-N	3			27	.3		
HTPR	27	0733	0736	0738	N12	W67	.915	16298	22.3	5	-F		C	0736	30	.7		
ABST	27	0734	0736	0739	N15	W71	.939	16298	22.0	5	1F		C	0736	87		D	
163 ABST	27	0757	0759	0808	N05	W66	.911	16298	22.4	11	-F		C	0759	70		DJ	ZX
164 KHAR	27	1013E		1016D	S03	W30	.523		25.2	3D	-F		P				D	ZX
165 KHAR	27	1030E	1035	1037D	S02	E03	.163		27.7	7D	-F		P				D	ZX
GRP78166	27	1215+0	1217+0	1227	S12	W11	.372	16321	26.7	12	-F				25	.3		
RAMY	27	1215	1217	1227	S12	W12	.380	16321	26.6	12	-N	3	C		29			
HTPR	27	1215	1217	1226	S12	W11	.372	16321	26.7	11	-F		C	1217	20	.2		
167 RAMY	27	1235	1238	1254	S20	E31	.652	16324	29.8	19	-F	3	C		35			ZX
GRP78168	27	1448>9	1502+2	1517	S13	W14	.411	16321	26.6	29	-F				35	.4		
RAMY	27	1448	1502	1524	S13	W14	.411	16321	26.6	3E	-F	3	C		52			
HOLL	27	1501	1504	1510	S13	W14	.411	16321	26.6	9	-F	3	C		21			
169 HTPR	27	1505	1508	1525	N20	W01	.227	16315	27.6	20	-F		C	1508	20	.2	E	ZX
170 HTPR	27	1525	1532	1550	N16	E25	.440	16325	29.5	25	-F		C	1532	30	.3	E	ZX
171 BIGB	27	1531	1539	1602	N06	W75	.963	16298	22.0	31	-F	2	C	1539	50			ZX
172 HTPR	27	1559	1604	1608	S27	E14	.595	16322	28.7	9	-F		C	1604	10	.1		ZX
GRP78173	27	1705+2	1709 1718	1725	N20	W02	.229	16315	27.6	20	-F						F	
RAMY	27	1705	1718	1735	N20	W03	.232	16315	27.5	30	-N	3	C		47		F	
BIGB	27	1707	1709	1715	N21	W01	.244	16315	27.6	8	-F	2	C	1709	50	.5		
GRP78174	27	1726+4	1727	1736	N16	W0E	.188	16315	27.3	10	-F						F	
BIGB	27	1726	1727	1731	N15	W07	.184	16315	27.2	5	-F	2	C	1727	30	.3		
HOLL	27	1730	1736	1741	N17	W05	.195	16315	27.4	11	-F	3	C		28		F	
GRP78175	27	1901>9	1909+0 1915	1953	N21	W02	.246	16315	27.6	52	-N				90	.9		
HOLL	27	1901	1909	2001	N23	W04	.285	16315	27.5	60	-N	3	C		138			
RAMY	27	1908	1909	2001	N20	W03	.232	16315	27.6	53	-B	3	C		91		FDE	
BIGB	27	1908	1909	1941	N21	W02	.246	16315	27.6	33	-N	2	C	1909	60	.6		
PALE	27	1912	1915	1945	N22	W02	.263	16315	27.7	33	-F	3	C		106		F	
176 BIGB	27	1928	1929	1939	N14	W01	.125	16315	27.7	11	-F	2	C	1929	30	.3		ZX
177 HOLL	27	2008	2023	2038	N17	E24	.431	16325	29.6	30	-F	3	C		36			ZX
178 PALE	27	2017	2017	2023	N22	W03	.265	16315	27.6	6	-F	3	C		43		F	ZX
179 HOLL	27	2115	2130	2143	N17	E23	.417	16325	29.6	28	-F	3	C		25			ZX

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX WEB. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78180	27	2128>9	2144+1	2210	N21	W04	.252	16315	27.6	42	-N				100	1.0		
PALE	27	2128	2144	2220D	N20	W04	.236	16315	27.6	52D	-N	3	C		107		F	
CULG	27	2135	2144	2151	N22	W05	.273	16315	27.5	16	-F		C	2144	100	1.0		
BIGB	27	2142	2145	2200	N21	W03	.249	16315	27.7	18	-N	2	C	2145	50	.5		
HOLL	27	2143E	2144	2257	N23	W06	.294	16315	27.5	74D	-B	3	C		134		DE	
GRP78181	27	2239+8	2248+2	2258	S13	W17	.440	16321	26.7	19	-F				50	.6	EH	
CULG	27	2239	2248	2258	S12	W18	.439	16321	26.6	19	-F		C	2248	40	.4		
VORO	27	2247	2250	2257	S14	W17	.452	16321	26.7	10	-F		C	2250	72	.8	EH	
GRP78182	27	2250+2	2253+4	2310	N19	E13	.301	16318	28.9	20	-F				140	1.5		
CULG	27	2250	2253U	2312D	N14	E14	.267	16318	29.0	22D	-F	*	P	2253	170	1.7	F	
VORO	27	2252	2257	2308	N25	E12	.365	16318	28.9	16	-F		C	2257	108	1.1	E	
GRP78183	27	2301+2	2305+1	2312	N20	W06	.248	16315	27.5	11	-F				80	.8		
CULG	27	2301	2305	2312D	N20	W06	.248	16315	27.5	11D	-F		P	2305	100	1.0		
PALE	27	2302	2306	2335	N21	W05	.257	16315	27.6	33	-F	2	C		59		F	
VORO	27	2303	2306	2310	N18	W06	.217	16315	27.5	7	-N		C	2306	81	.8	E	
GRP78184	27	2306+2	2309+3	2319	N22	E22	.439	16325	29.6	13	-F				100	1.1	EJ	
CULG	27	2306	2309	2312D	N21	E22	.431	16325	29.6	6D	-F	*	P	2309	100	1.0		
VORO	27	2308	2310	2318	N22	E22	.439	16325	29.6	10	-F	*	C	2310	134	1.5	EJ	
HOLL	27	2308	2312	2320	N23	E22	.448	16325	29.6	12	-F	*	C		24			
GRP78185	27	2325>9	2356+8	0030D	S20	E26	.603	16324	29.9	65	-F				100	1.2	JU	
CULG	27	2325	2403	0106	S18	E25	.574	16324	29.9	101	1N		P	2403	200	2.4		
PALE	27	2344	2404	0020D	S21	E27	.622	16324	30.0	3ED	-F	2	C		30		F	
HOLL	27	2351E	2356	0022D	S21	E28	.632	16324	30.1	31D	-N	2	C		96		U	
VORO	27	2354	2359	0030	S20	E26	.603	16324	29.9	36	-F		C	2359	108	1.3	EJ	
GRP78186	28	0007+1	0013+1	0023D	N26	W44	.720	16310	24.7	16	-F						F	
CULG	28	0007	0013U	0023D	N27	W45	.733	16310	24.6	16D	1F		P	0013	190	2.9		
HOLL	28	0008	0014	0022D	N26	W44	.720	16310	24.7	14D	-F	2	C		77		F	
GRP78187	28	0227+2	0230+1	0239	S18	W50	.822	16305	24.4	12	-F				60	1.0	DJ	
CULG	28	0227	0231	0241	S18	W51	.830	16305	24.3	14	-F		C	0231	70	1.3		
VORO	28	0229	0230	0237	S19	W50	.825	16305	24.4	8	-F		C	0230	63	1.1	DJ	
GRP78188	28	0757+1	0758	0811	N16	E03	.167	16318	28.6	14	-F						D	
HTPR	28	0757	0758	0812	N16	E04	.173	16318	28.6	15	-F		C	0758	20	.2		
ISTA	28	0758		0809	N17	E03	.183	16318	28.6	11	-F		V				D	
189 TELV	28	0825	0827	0836	N13	E00	.187	16318	28.4	11	-N	2			27	.3	W	ZX
190 HTPR	28	0935	0937	0945	N13	E06	.148	16318	28.8	10	-F		C	0937	20	.2		ZX
191 TELV	28	1113	1113	1124	N11	W02	.080	16318	28.3	11	-N	3			6	.1	U	ZX
GRP78192	28	1303+7	1316 1346+5	1430	N17	W16	.319	16315	27.3	87	-F				30	.3	E	
RAMY	28	1303	1346	1359	N17	W16	.319	16315	27.3	56	-N	3	C		61			
HTPR	28	1310	1316	1319	N18	W10	.255	16315	27.8	9	-F		C	1316	20	.2		
HTPR	28	1323	1328	1430	N16	W15	.297	16315	27.4	67	-F		C	1328	20	.2		
HOLL	28	1341	1350	1354	N17	W16	.319	16315	27.4	13	-F	3	C		28			
HTPR	28	1342	1351	1415D	N14	W08	.184	16315	28.0	33D	-F	*	C	1351	20	.2	E	
HOLL	28	1357	1404	1434	N18	W16	.328	16315	27.4	37	-F	3	C		38			
193 HTPR	28	1346	1347	1405	S30	E85	1.000	16334	4.9	19	-F		C	1347	10			ZX
194 HOLL	28	1350	1351	1411	N15	W01	.143	16318	28.5	21	-F	*	C		25			ZX
195 HOLL	28	1421	1424	1437	N04	W79	.980	16298	22.7	16	-F	3	C					ZX
196 HTPR	28	1447	1451	1502	N24	E03	.299	16330	28.8	15	-F		C	1451	20	.2	E	ZX
197 HOLL	28	1520	1533	1552	S21	E20	.560	16324	30.1	32	-F	3	C		36			ZX
GRP78198	28	1846+0	1847+1	1912	N18	E13	.290	16325	29.8	26	-N				150	1.6	F	
RAMY	28	1846	1847	1912	N17	E13	.280	16325	29.8	26	-N	3	C		136			
HOLL	28	1846	1848	1912	N20	E13	.313	16325	29.8	26	-B	3	C		167			
PALE	28	1847E	1847U	1917	N18	E16	.492	16325	30.0	30D	-N	3	C		134		F	
199 HOLL	28	2006	2010	2021	N24	W18	.412	16315	27.5	15	-N	3	C		34			ZX
	28	2114	2156	NO FLARE PATROL														
200 HOLL	28	2157E	2157U	2222	N20	E08	.263	16325	29.5	25D	-N	3	C		197			ZX

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX WEST DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
201 HOLL	28	2200	2203	2220	N19	W22	.416	16315	27.3	20	-N	3	C		28		F	ZX
	28	2226	2233	NO FLARE PATROL														
202 HOLL	28	2240	2245	2252	N02	W86	.997	16298	22.5	12	-F	3	C					ZX
GRP78203	28	2252+0	2256+2	2309	N17	E08	.222	16325	29.6	17	1N				200	2.1	EJ	
VORO	28	2252	2258	2309	N16	E09	.220	16325	29.6	17	-N		C	2258	188	1.9	EJ	
HOLL	28	2252	225E	2303D	N18	E08	.235	16325	29.6	11D	1B	3	C		217		DE	
204 VORO	29	0036	0038	0044	S03	W90	1.000	16298	22.3	8	-F		C	0038	54		DGJ	ZX
	29	0250	0315	NO FLARE PATROL														
	29	0320	0500	NO FLARE PATROL														
205 ISTA	29	0640E		0700	N17	W24	.431	16315	27.5	20D	?N		V				BD	ZX
	IMP.1 NO I TACH ABST																	
GRP78206	29	0646+2	0649+1	0658	N19	E07	.241	16325	29.8	12	1N				270	2.8	EU	
ISTA	29	0646	0649	0703	N19	E07	.241	16325	29.8	17	1B		V				E	
ABST	29	0648	0650	0658	N17	E06	.284	16325	29.7	10	1F		C	0650	218	2.3	E	
TACH	29	0648	0650	0653	N20	E09	.430	16325	30.0	5	1N		C	0650	327	3.5	U	
207 ABST	29	0708	0711	0733	N17	W27	.474	16315	27.3	25	-F		C	0711	166	1.9	D	ZX
208 ISTA	29	0728		0845	N08	W90	1.000	16298	22.6	77	-F		V				AD	ZX
209 HTPR	29	0816	0818	0826	N14	W01	.126	16325	29.3	10	-F		C	0818	20	.2	E	ZX
210 HTPR	29	0940	0947	1006	N23	W90	.999	16307	22.7	26	-F		C	0947	30			ZX
211 HTPR	29	1026	1028	1031	N14	W02	.130	16325	29.3	5	-F		C	1028	20	.2	E	ZX
	29	1103	1110	NO FLARE PATROL														
	29	1204	1223	NO FLARE PATROL														
	29	1246	1319	NO FLARE PATROL														
	29	1423	1426	NO FLARE PATROL														
212 HOLL	29	1646	1648	1712	N17	W30	.515	16315	27.4	26	-F	3	C		60			ZX
GRP78213	29	1831+1	1837+0	1910	N15	W31	.522	16315	27.4	39	-F				50	.6	F	
HOLL	29	1831	1837	1910	N17	W31	.529	16315	27.4	39	-N	3	C		69			
PALE	29	1832	1837	1839D	N14	W31	.519	16315	27.4	7D	-F	2	C		35		F	
214 HOLL	29	1839	1858	1913	N14	E68	.921	16337	4.9	34	-F	3	C					ZX
	29	2019	2042	NO FLARE PATROL														
	29	2203	2211	NO FLARE PATROL														
215 CULG	29	2343E	2343U	2350D	N24	W33	.588	16315	27.5	7D	-F		P	2343	90	1.1		ZX
216 CULG	29	2343E	2345U	2350D	N14	E60	.860	16337	4.5	7D	-F	*	P	2345	40	.8		ZX
GRP78217	30	0017	0042+5	0226	N17	W34	.570	16315	27.5	129	-N				60	.7	J	
PURP	30	0017	0042	0226	N17	W34	.570	16315	27.5	129	1B		C					
CULG	30	0026E	0047U	0052D	N18	W35	.586	16315	27.4	26D	-N		P	0047	80	1.0		
VORO	30	0033E		0045D	N16	W34	.567	16315	27.5	12D	-F		P	0035	72	.8	EJ	
MANI	30	0045E	0045U	0050D	N17	W33	.556	16315	27.6	5D	-N	3	C		50		F	
218 VORO	30	0038	0039	0045D	S29	W90	1.002	16306	23.3	7D	-F		C	0039	27		GJ	ZX
219 CULG	30	0510E	0515	0602U	N15	E57	.833	16337	4.5	52D	-N		P	0515	80	1.4	F	ZX
220 CULG	30	0510E	0516	0530	S24	W23	.617	16322	28.5	20D	-F	*	P	0516	80	1.0		ZX
221 CULG	30	0527	0529	0531D	S11	E50	.797		4.0	4D	-N		P	0529	60	1.0		ZX
GRP78222	30	0614+2	0616 0622+0	0701	N18	W37	.612	16315	27.5	47	2B				660	8.4	E	
ATHN	30	0614	0616	0647	N18	W38	.625	16315	27.4	33	-B	3	C		48		DE	
TACH	30	0615	0622	0700	N18	W3E	.599	16315	27.6	45	2B		C	0622	794	10.4	E	
PURP	30	0616	0622	0657	N17	W37	.609	16315	27.5	41	2B		P		528	7.1		
ISTA	30	0627E		0705	N20	W37	.619	16315	27.5	38D	3B		V				BF	
ABST	30	0632E	0632	0722	N17	W37	.609	16315	27.5	50D	1N		P	0632	306	3.9	E	

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78223	30	0627>9	0707	0718	N14	E54	.804	16337	3.3	51	?F						DKU	
ISTA	30	0627E		0725	N15	E54	.804	16337	4.3	58D	?N		V				BKU	
	IMP.2 IMP.S																	
ABST	30	0714	0707	0711	N13	E55	.814	16337	4.4	7	-F		C	0707	79	1.4	D	
GRP78224	30	0732+0	0738+2	0745D	N12	W22	.380	16318	28.7	13	-F							
ISTA	30	0732	0738	0745	N13	W22	.383	16318	28.7	13	-F		V				E	
ABST	30	0732	0740	0828	N11	W22	.377	16318	28.7	56	-N		C	0740	87	1.0	F	
GRP78225	30	0735+8	0758+3	0845	N21	W35	.647	16315	27.4	70	-N						DJK	
ISTA	30	0735		0845D	N21	W41	.670	16315	27.2	70D	-F		V				DK	
ABST	30	0739	0758	0853D	N20	W39	.643	16315	27.4	74D	-F		P	0758	96	1.2	DJ	
PURP	30	0743	0801	0807	N22	W35	.602	16315	27.7	24	-B		C					
226 ISTA	30	0826	0830	0844	S23	W01	.497	16324	30.3	18	-N		V				D	ZX
	30	0856	0903	NO FLARE PATROL														
227 CATA	30	1040	1045	1115D	S27	W90	1.001	16306	23.7	35D	1N	2	P	1045	112			ZX
	30	1115	1135	NO FLARE PATROL														
228 RAMY	30	1135E	1139	1154	N16	W40	.646	16315	27.5	19D	-N	3	C		30		F	ZX
229 RAMY	30	1135E	1140U	1157D	S27	W86	1.000	16306	24.0	22D	-N	3	C					ZX
230 RAMY	30	1139	1143	1159	N15	W26	.451	16318	28.5	20	-N	3	C		38			ZX
231 RAMY	30	1149	1206	1311	N13	W12	.231	16325	29.6	82	-N	3	C		107			ZX
232 RAMY	30	1251	1253	1302	S25	W04	.530	16324	30.2	11	-F	3	C		35			ZX
233 RAMY	30	1433	1447	1500	N14	E73	.951	16336	6.1	27	-F	3	C					ZX
GRP78234	30	1510	1511	1543	N21	W43	.694	16315	27.4	33	-N							
			1525															
HOLL	30	1510	1511	1543	N24	W44	.714	16315	27.3	33	-N	2	C		44			
HOLL	30	1511	1525	1537	N19	W42	.677	16315	27.5	26	-N	2	C		47			
GRP78235	30	1611+1	1613+1	1621	N18	W17	.342	16325	29.4	10	-N				50	.5	F	
HOLL	30	1611	1614	1620	N20	W18	.373	16325	29.3	9	-N	3	C		60		F	
RAMY	30	1612	1613	1621	N17	W17	.324	16325	29.4	9	-N	3	C		40			
236 HOLL	30	1620	1622	1630	S20	W06	.460	16324	30.2	10	-F	3	C		34			ZX
237 HOLL	30	1804	1811	1818	N17	E50	.764	16337	4.5	14	-F	3	C		21			ZX
238 HOLL	30	1810	1811	1820	S24	E39	.754		3.7	10	-N	3	C		30			ZX
GRP78239	30	1837+2	1840+0	1858	N19	W46	.723	16315	27.3	21	-N							
HOLL	30	1837	1840	1855	N22	W47	.740	16315	27.3	18	-N	3	C		82		F	
HUAN	30	1837		1852	N18	W45	.710	16315	27.4	15	-F	1	C				E	
BIGB	30	1839	1840	1900	N21	W48	.749	16315	27.2	21	-N	2	C	1840	30	.5		
PALE	30	1856E	1904	1907	N18	W46	.721	16315	27.3	11D	-F	3	C		46		FDE	
240 HOLL	30	1916	1918	1924	N17	E49	.753	16337	4.5	8	-F	3	C		27			ZX
241 PALE	30	2008E	2009U	2011	S13	W59	.882	16321	26.4	3D	-F	3	C		29		F	ZX
242 CULG	30	2115	2136	2207D	N18	W45	.710	16315	27.5	52D	-N		P	2136	70	1.0	KF	ZX
GRP78243	30	2212>9	2220	2249	S24	W30	.675	16322	28.7	37	-F							
			2233															
HOLL	30	2212	2220	2302	S21	W31	.659	16322	28.6	50	-F	2	C		27			
PALE	30	2227	2233	2236	S27	W29	.694	16322	28.8	9	-F	3	C		26		DE	
244 PALE	30	2224E	2226	2232	N16	E71	.939	16336	6.3	8D	-F	3	C		27		DE	ZX
245 CULG	30	2250	2317	2340	N14	W71	.940	16313	25.6	50	-N		C	2317	130		K	ZX
GRP78246	30	2335+0	2337+0	2347D	N17	W35	.583	16318	28.4	12	-N				160	2.0	EJ	
CULG	30	2335	2337	0030	N19	W35	.590	16318	28.4	55	1N		C	2337	210	2.6		
VORO	30	2335	2337	2347	N15	W35	.578	16318	28.4	12	-N		C	2337	108	1.3	EJ	
GRP78247	30	2336+0	2337+2	2345	N23	W40	.666	16315	28.0	9	-N				45	.6	F	
CULG	30	2336	2337	2345	N23	W40	.666	16315	28.0	9	-F		C	2337	50	.7		
HOLL	30	2336	2339	2341D	N24	W41	.681	16315	27.9	5D	-B	2	C		36		F	

Hα SOLAR FLARES

SEPTEMBER 1979

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	

"REMARKS":

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by high-speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the H and K lines of CaII.
P = Flare shows helium D3 in emission.
Q = Flare shows Balmer continuum in emission.
R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
S = Brightness follows disappearance of filament in same position.
T = Region active all day.
U = Two bright branches, parallel or converging.
V = Occurrence of an explosive phase: important, expansion within roughly 1 minute that often includes a significant intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H-alpha line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

DAILY FLARE INDICES

Includes all Flares

SEPTEMBER 1979

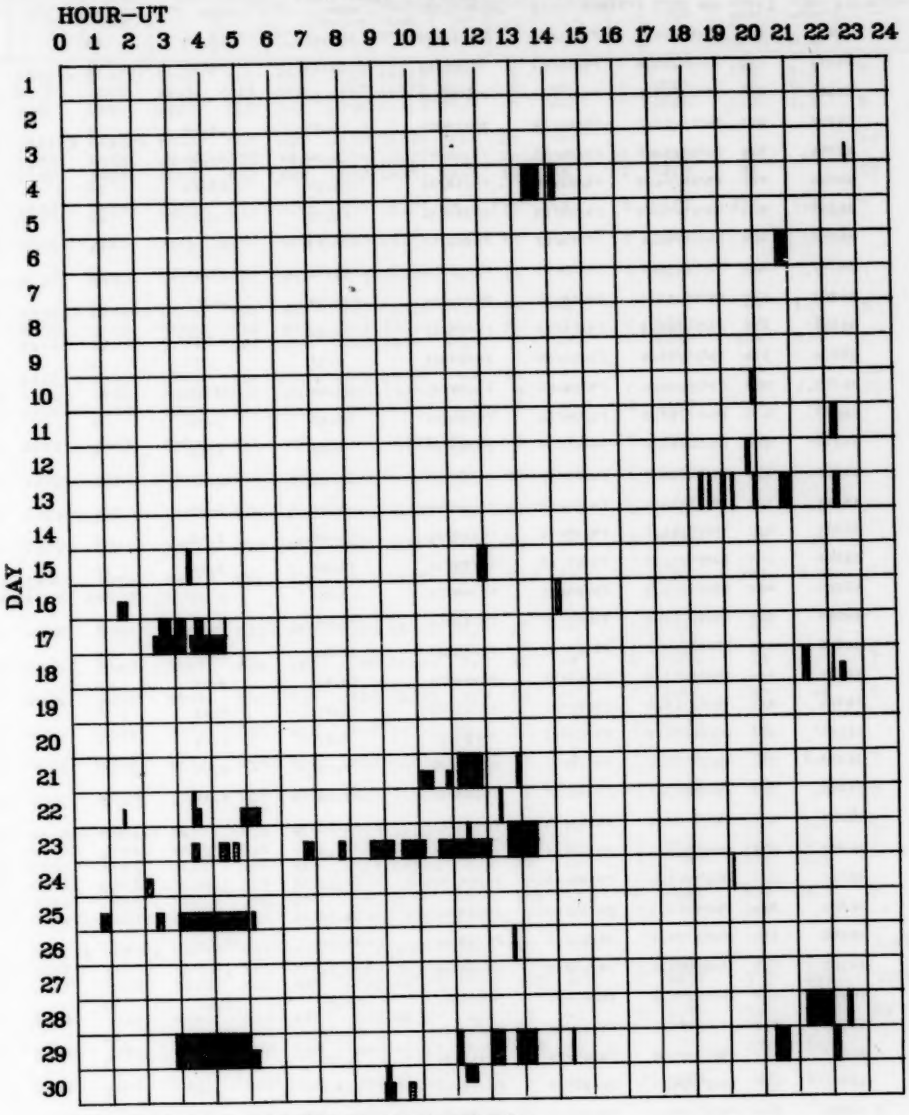
Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.
790901.	69.26	24.0	790911.	279.26	23.8	790921.	307.65	23.2
790902.	92.10	24.0	790912.	77.56	23.9	790922.	184.70	23.9
790903.	151.00	24.0	790913.	102.67	23.2	790923.	162.46	23.1
790904.	84.58	23.4	790914.	410.10	24.0	790924.	238.24	24.0
790905.	75.74	24.0	790915.	248.00	23.7	790925.	113.22	24.0
790906.	93.09	23.8	790916.	217.88	23.9	790926.	141.34	23.9
790907.	251.97	24.0	790917.	36.42	23.2	790927.	126.38	24.0
790908.	143.93	24.0	790918.	67.20	23.8	790928.	92.27	23.2
790909.	71.90	24.0	790919.	1149.57	24.0	790929.	71.67	20.4
790910.	136.76	24.0	790920.	164.10	24.0	790930.	307.44	23.6

When no Flare Index is given, it is 0 for that day.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

SEPTEMBER 1979



Observatories included in total patrol:

Abastumani	Catania	Istanbul	Lvov	Ramey
Athens	Culgoora	Kanzelhoehe	Manila	Tashkent
Bern	Haute Provence	Kharkov	Mitaka	Tel Aviv
Big Bear	Holloman	Kodaikanal	Monte Mario	Voroshilov
Bucharest	Huancayo	Locarno	Palehua	Wendelstein
			Purple Mt.	Yunnan

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

REGIONAL FLARE INDEX

Includes all Flares

SEPTEMBER 1979

HC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
16252	N19	79/09/02.1	79/08/26	79/09/08	333.62	23.84	69
16271	S28	79/09/02.6	79/09/03	79/09/08	39.89	6.65	15
16261	S15	79/09/03.4	79/08/29	79/08/29	.84	.84	1
16260	N13	79/09/03.7	79/08/28	79/09/07	11.19	1.02	5
16265	S30	79/09/04.0	79/09/03	79/09/03	10.34	10.34	1
16263	N22	79/09/04.9	79/08/29	79/09/09	165.18	13.76	56
16264	N13	79/09/04.9	79/08/29	79/09/08	45.56	4.14	22
16269	N14	79/09/06.1	79/09/02	79/09/11	206.68	20.67	66
16276	S21	79/09/06.2	79/09/05	79/09/09	65.92	13.18	15
16267	S22	79/09/07.3	79/08/31	79/09/14	212.50	14.17	42
16281	S26	79/09/08.9	79/09/10	79/09/14	4.64	.93	4
16274	S14	79/09/09.5	79/09/06	79/09/14	6.97	.77	4
16275	N15	79/09/10.6	79/09/04	79/09/15	433.66	33.36	61
16277	S 4	79/09/12.3	79/09/11	79/09/14	15.83	3.96	5
16278	N27	79/09/12.4	79/09/07	79/09/07	0.00	0.00	1
16279	N13	79/09/14.8	79/09/07	79/09/20	684.87	48.92	106
16284	S11	79/09/15.4	79/09/16	79/09/16	5.28	5.28	1
16282	N27	79/09/16.2	79/09/11	79/09/20	24.03	2.40	6
16285	S27	79/09/17.3	79/09/13	79/09/22	33.39	3.34	20
16288	N22	79/09/17.8	79/09/11	79/09/22	13.72	1.14	5
16293	S15	79/09/17.9	79/09/14	79/09/15	15.41	7.71	5
16291	N33	79/09/19.2	79/09/13	79/09/23	12.44	1.13	6
16295	S14	79/09/19.3	79/09/15	79/09/24	94.51	9.45	12
16319	N15	79/09/20.2	79/09/23	79/09/25	16.23	5.41	7
16296	N17	79/09/20.2	79/09/15	79/09/17	4.27	1.42	2
16303	S11	79/09/21.0	79/09/20	79/09/20	5.28	5.28	1
16304	S 9	79/09/22.0	79/09/17	79/09/21	7.20	1.44	3
16298	N 6	79/09/22.1	79/09/15	79/09/29	2243.27	149.55	154
16300	S23	79/09/22.4	79/09/10	79/09/13	9.92	4.96	5
16307	N23	79/09/22.6	79/09/10	79/09/29	47.67	3.97	15
16306	S34	79/09/23.9	79/09/20	79/09/30	6.97	.63	6
16305	S16	79/09/24.2	79/09/10	79/09/28	185.28	9.57	27
16312	N14	79/09/24.5	79/09/19	79/09/22	8.68	2.17	4
16310	N27	79/09/24.6	79/09/17	79/09/25	31.35	2.61	19
16314	S13	79/09/25.4	79/09/22	79/10/02	33.88	3.08	11
16313	N17	79/09/25.8	79/09/26	79/10/01	6.97	1.16	3
16321	S13	79/09/26.5	79/09/27	79/10/01	4.00	.80	5
16320	N10	79/09/26.7	79/09/23	79/09/26	37.68	9.42	4
16315	N18	79/09/27.4	79/09/21	79/10/04	468.85	33.49	77
16318	N16	79/09/28.5	79/09/26	79/10/04	77.72	8.64	15
16322	S26	79/09/28.7	79/09/22	79/10/04	26.24	2.02	14
16330	N26	79/09/29.0	79/09/25	79/09/28	7.28	1.82	2
16325	N17	79/09/29.8	79/09/23	79/10/03	168.05	15.28	30
16324	S22	79/09/30.1	79/09/24	79/10/06	106.16	8.17	41
16345	N10	79/09/30.5	79/10/04	79/10/06	2.54	.85	3

Hα SOLAR FLARES

OCTOBER 1979

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP78248	01	0002+4	0007+1	0011	N19	W46	.723	16315	27.6	9	-F				100	1.5	D	
CULG	01	0002	0007	0011	N19	W46	.723	16315	27.6	9	-F		C	0007	80	1.1		
VORO	01	0006	0008	0010	N19	W47	.735	16315	27.5	4	-N		C	0008	116	1.2	D	
GRP78249	01	0023+5	0029+4	0044	S12	W62	.902	16321	26.4	21	-N						DJ	
CULG	01	0023	0033	0047	S13	W62	.904	16321	26.4	24	-F		C	0033	30	.8		
VORO	01	0028	0029	0040	S12	W62	.902	16321	26.4	12	-B		C	0029	81		DJ	
250 CULG	01	0030	0123	0220	N10	W26	.437	16325	29.1	110	-F		C	0123	120	1.4	S	ZX
251 CULG	01	0041	0046	0111	N17	W48	.743	16315	27.4	30	-F		C	0046	60	.9		ZX
252 CULG	01	0112	0121	0128	N13	E43	.679	16337	4.3	16	-N		C	0121	50	.7	T	ZX
GRP78253	01	0141+2	0144+2	0156	N16	W48	.741	16315	27.5	15	-N				90	1.4	E	
CULG	01	0141	0146	0201	N16	W48	.741	16315	27.5	20	-F		C	0146	60	.9		
VORO	01	0143	0144	0150	N16	W49	.752	16315	27.4	7	1N		C	0144	134	2.0	E	
GRP78254	01	0151+4	0157+1	0202	N14	E40	.642	16337	4.1	11	-F						DH	
VORO	01	0151	0158	0200	N15	E40	.644	16337	4.1	9	-F		C	0158	99	1.3	DH	
CULG	01	0155	0157	0203	N13	E40	.641	16337	4.1	8	-F		C	0157	30	.4	H	
255 CULG	01	0250	0252	0255	N18	W54	.806	16315	27.1	5	-F		C	0252	10	.2		ZX
256 CULG	01	0302	0309	0332	N13	W33	.546	16318	28.7	30	-F		C	0309	40	.5		ZX
257 CULG	01	0309U	0329U	0353U	S30	E40	.800	16334	4.1	44D	-F		C	0329	40	.7	F	ZX
258 CULG	01	0310	0312	0320	N18	W53	.797	16315	27.2	10	-F		C	0312	30	.5		ZX
259 CULG	01	0345	0356	0432U	S24	W15	.560	16324	30.0	47D	?N		C	0356	280	3.5	F	ZX
	IMP.1	NO	PURP	MITK														
260 CULG	01	0355	0357	0408	N16	W75	.960	16313	25.5	13	-N		C	0357	60			ZX
261 CULG	01	0404	0408	0417	N10	E81	.985	16336	7.2	13	-F		C	0408	20		T	ZX
262 CULG	01	0405	0408	0418	S40	E10	.739	16331	1.9	12	-F		C	0408	60	.8	G	ZX
263 CULG	01	0445	0452	0459	S23	W18	.567	16324	29.8	13	-F		C	0452	60	.7		ZX
264 CULG	01	0518	0526	0531	N15	E66	.907	16336	6.2	13	-F		C	0526	70	1.6	T	ZX
265 CULG	01	0536	0539	0544	N20	W55	.818	16315	27.1	8	-F		C	0539	50	.9	H	ZX
GRP78266	01	0545+9	0556+5	0622	S25	W16	.579	16324	30.0	37	1B				210	2.5	EJ	
TAGM	01	0545D	0558	0620	S25	W16	.579	16324	30.0	35D	1B		C	0558	221	2.7	E	
CULG	01	0554	0559	0633	S25	W16	.579	16324	30.0	39	1N		P	0559	350	4.2		
PURP	01	0556E	0556	0612	S25	W16	.579	16324	30.0	16D	1B		P					
ABST	01	0558E	0559	0627D	S26	W16	.591	16324	30.0	29D	1N		P	0559	208	2.6	EJ	
ATHN	01	0608E	0601U	0619	S23	W15	.547	16324	30.1	19D	-B	3	C		127		F	
GRP78267	01	0608>9	0623+1	0649D	N21	W50	.770	16315	27.5	49	-F						EJKV	
CULG	01	0608	0624U	0649U	N21	W51	.780	16315	27.4	49D	-F		P	0624	80	1.2		
ABST	01	0622	0623	0640D	N22	W49	.762	16315	27.6	18D	1F		P	0623	175	2.8	EJKV	
268 ABST	01	0638	0639	0643	N14	E37	.603	16337	4.1	5	-F		C	0639	105	1.4	EV	ZX
269 TELV	01	0649E	0651	0705	N27	E22	.487	16329	2.9	16D	-N	3			122	1.3		ZX
270 CULG	01	0649	0652	0656	N19	W56	.826	16315	27.1	7	-N		C	0652	60	1.1		ZX
GRP78271	01	0729E	0806+4 0836	0840	N17	W52	.785	16315	27.4	71	1N						E	
KHAR	01	0729E		0755D	N16	W52	.785	16315	27.4	26D	-F	*	P				E	
ISTA	01	0740E		0816	N16	W52	.785	16315	27.4	36D	1N	*					E	
KHAR	01	0802E	0807	0815D	N17	W58	.843	16315	27.8	13D	-F	*	P					
CATA	01	0805	0810	0845	N15	W51	.773	16315	27.5	40	1B	*	C	0810	140	2.2		
PURP	01	0806E	0806	0816	N18	W49	.755	16315	27.7	10D	1B	*	P					
ISTA	01	0835	0836	0840	N19	W56	.826	16315	27.2	5	-F	*					D	
272 ISTA	01	0740E		0805D	N20	W37	.619	16318	28.5	25D	-F						E	ZX
273 TELV	01	0819	0821	0944D	N29	E36	.650		4.0	85D	-N	3			30	.3		ZX

Hα SOLAR FLARES

OCTOBER 1979

OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78274	01	0846		0859	N18	W51	.776	16315	27.5	13	1N						U	
ISTA	01	0846		0900	N18	W53	.797	16315	27.4	14	1N						U	
PURP	01	0852E	0852	0858	N18	W50	.766	16315	27.6	6D	1B		C					
275 ISTA	01	0853	0859	0912	N17	W26	.460	16325	29.4	19	-N						D	ZX
276 ISTA	01	0907		0918	N14	E57	.833	16336	5.7	3	-F						D	ZX
277 TELV	01	0908E	0918	0936	N22	E80	.979	16336	7.4	28D	-F	3			27			ZX
GRP78278	01	0920+4	0922+5	0949	N16	W51	.774	16315	27.6	29	1B				130	2.1		
CATA	01	0920	0925	0955	N16	W52	.785	16315	27.5	35	1B	2	C	0925	168	2.8		
MONT	01	0922E	0922	0950	N17	W51	.775	16315	27.6	28D	-N		C	0922	100			
ATHN	01	0924	0927	0947	N16	W59	.852	16315	27.8	23	-B	3	C		111		F	
ISTA	01	0930E		0947	N18	W51	.776	16315	27.6	17D	1B						E	
279 ISTA	01	0945	0947	0959	N14	E38	.616	16337	4.3	14	-N						D	ZX
280 RAMY	01	1136	1136	1149	N17	W53	.796	16315	27.5	13	-N	3	C		46		F	ZX
281 RAMY	01	1444	1446	1532	N14	E60	.860	16336	6.1	48	-F	3	C		17			ZX
282 HUAN	01	1608		1615	N18	W56	.826	16315	27.5	7	-F	1	C					ZX
GRP78283	01	1754	1824	1916	N10	E74	.957	16336	7.3	82	-N						E	
BIGB	01	1754	1824	1916	N09	E75	.962	16336	7.4	82	-B	2	C	1824	120			
HUAN	01	1816E		1830D	N12	E74	.956	16336	7.3	14D	-N	1	P	1816	60		E	
284 BIGB	01	1822	1823	1825	N24	W55	.823	16315	27.6	3	-F	2	C	1823	20	.4		ZX
285 BIGB	01	1826	1827	1831	N20	W57	.836	16315	27.5	5	-F	2	C	1827	60	1.1		ZX
286 BIGB	01	1926	1928	1945	N28	W58	.854	16315	27.5	19	-B	2	C	1928	60	1.2		ZX
GRP78287	01	2131+1	2133+0	2143	N20	W62	.878	16315	27.2	12	-N				80	1.8		
BIGB	01	2131	2133	2148	N20	W63	.886	16315	27.2	17	-B	2	C	2133	80	1.8		
CULG	01	2132	2133	2138	N20	W61	.870	16315	27.3	6	-N		P	2133	80	1.7		
288 CULG	01	2223U	2223U	2232	N23	W60	.864	16315	27.4	9D	-F		P	2223	40	.8		ZX
289 CULG	02	0046	0102	0144	N13	W29	.488	16325	29.9	58	-F		C	0102	60	.7	F	ZX
290 CULG	02	0053	0057	0106	S24	W27	.649	16324	30.0	13	-F		C	0057	50	.7		ZX
291 CULG	02	0148	0154	0211	N18	W61	.870	16315	27.5	23	-N		C	0154	50	1.0		ZX
292 CULG	02	0330E	0330U	0331D	S23	W30	.666	16324	29.9	1D	-F		P	0330	60	.8		ZX
293 CULG	02	0403	0404	0410	S26	W45	.814	16322	28.8	7	-F		C	0404	50	.9		ZX
294 CULG	02	0413	0424	0432	N19	W66	.908	16315	27.2	19	-F		C	0424	60	1.3		ZX
295 CULG	02	0436	0444	0528	N13	E60	.860	16336	6.7	52	-F		P	0444	70	1.4	F	ZX
296 TACH	02	0539	0540	0543	S13	W89	1.000	16314	25.6	4	-B		C	0540	44		D	ZX
297 CULG	02	0552E	0552U	0556	S26	W47	.830	16322	28.7	4D	-F		P	0552	50	1.0		ZX
298 CULG	02	0555	0556U	0556D	N19	W65	.901	16315	27.4	1D	-F		P	0556	20	.5		ZX
299 CULG	02	0635	0647	0710	N13	E23	.399	16337	4.0	35	-N		C	0647	180	2.0	K	ZX
300 HTPR	02	0717	0720	0736	N11	E50	.761	16336	6.1	19	-F		C	0720	20	.3	E	ZX
301 HTPR	02	0726	0728	0745	N13	E25	.429	16337	4.2	19	-F		C	0728	18	.1		ZX
302 HTPR	02	0839	0849	0900	N13	E24	.414	16337	4.2	21	-F		C	0849	30	.3	E	ZX
GRP78303	02	0935+1	0935+5	1003	N13	E24	.414	16337	4.2	28	-B				130	1.4	E	
CATA	02	0935E	0940	0955D	N14	E22	.388	16337	4.0	20D	-B	2	P	0940	168	1.8		
LOCA	02	0935E	0935	0955	N13	E23	.399	16337	4.1	20D	1N		V	0935	224	2.5		
HTPR	02	0936	0938	1110	N13	E27	.601	16337	4.4	94	-B		C	0938	100	1.2	E	
ATHN	02	0937E	0939U	0947	N13	E25	.429	16337	4.3	10D	-B	2	C		48		DE	
KHAR	02	0947E		1020D	N13	E25	.429	16337	4.3	33D	1F		P	0947	200	2.3	BE	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP78304	02	0959+2	1001+1	1019	N16	W67	.914	16315	27.4	20	-F				10		D	
TELV	02	0959	1001	1020	N15	W63	.885	16315	27.7	29	-N	2			6	.1		
KHAR	02	1001E	1001	1019D	N17	W69	.927	16315	27.2	18D	-F		P				D	
HTPR	02	1001	1002	1010	N16	W67	.914	16315	27.4	9	-F		C	1002	10	.2		
305 TELV	02	1011E		1040D	N19	E03	.219	16329	2.6	29D	-N	3						ZX
306 TELV	02	1039	1041	1047	N17	W43	.685	16325	29.2	8	-N	2			40	.5		ZX
307 RAMY	02	1122	1123	1126	S25	W32	.780	16324	30.1	4	-F	3	C		22			ZX
308 HTPR	02	1135	1140	1145	N23	E90	.999	16341	9.2	10	-F		C	1140	20		A	ZX
GRP78309	02	1158+1	1158+3	1208	N14	E90	1.000	16344	9.2	10	-N						AD	
KHAR	02	1158E	1158	1202D	N12	E90	1.000	16344	9.2	4D	-F		P				D	
HTPR	02	1159	1201	1208	N15	E90	1.000	16344	9.2	9	-N		C	1201	50		A	
RAMY	02	1201E	1201U	1208	N14	E84	.992	16344	8.8	7D	-B	3	C					
GRP78310	02	1201	1355	1418	N27	E84	.989	16341	8.8	137	-F							
RAMY	02	1201	1355	1418	N27	E78	.972	16341	8.4	137	-F	3	C					
KHAR	02	1212E	1212	1230D	N27	E90	.999	16341	9.3	18D	-N		P					
311 HTPR	02	1212	1216	1250	N12	E24	.411	16337	4.3	38	-F	*	C	1216	20	.2		ZX
312 RAMY	02	1241	1242	1252	S25	W33	.788	16324	30.1	11	-F	3	C		27			ZX
313 RAMY	02	1336	1337	1350	S28	W50	.861	16322	28.8	14	-F	3	C		20			ZX
GRP78314	02	1342+1	1344+1	1401	N13	E23	.399	16337	4.3	19	-F				30	.3	E	
HTPR	02	1342	1345	1405	N12	E23	.396	16337	4.3	23	-F		C	1345	30	.3	E	
RAMY	02	1343	1344	1357	N15	E23	.407	16337	4.3	14	-N	3	C		31			
315 RAMY	02	1400	1400	1418	N13	E56	.823	16336	6.8	18	-F	3	C		15			ZX
GRP78316	02	1437+5	1446 1458+2	1604D	S29	E25	.682	16334	4.5	87	1N						HU	
RAMY	02	1437	1446	1604	S28	E26	.680	16334	4.6	87	1N	3	C		182		F	
LOCA	02	1440	1500	1515D	S30	E25	.693	16334	4.5	35D	2N		V	1500	469	6.7	H	
BIGB	02	1442	1458	1715	S29	E24	.676	16334	4.4	153	-B	2	C	1458	140	1.6		
HTPR	02	1451E		1528D	S29	E26	.689	16334	4.6	37D	1B		C	1455	300	3.3	EU	
317 RAMY	02	1442	1443	1446	N13	E55	.814	16336	6.7	4	-F	3	C		21			ZX
318 BIGB	02	1558	1601	1615	N23	E90	.999	16341	9.4	17	-N	2	C	1601	40			ZX
GRP78319	02	1620	1622	1638	N12	E21	.365	16337	4.3	18	-N						E	
BIGB	02	1620	1622	1638	N12	E21	.365	16337	4.3	18	-N	1	C	1622	60	.7		
HUAN	02	1627E		1633D	N13	E22	.384	16337	4.3	6D	-N	1	P	1629	30	.3	E	
320 BIGB	02	1719	1722	1736	S31	E22	.684	16334	4.4	17	-N	1	C	1722	30	.3		ZX
321 BIGB	02	1742	1743	1758	N22	E85	.992	16341	9.1	16	-N	1	C	1743	60			ZX
322 BIGB	02	1748	1750	1802	S24	W36	.727	16324	30.0	14	-N	1	C	1750	40	.5		ZX
323 BIGB	02	1827	1828	1832	N22	W78	.972	16315	26.9	5	-N	2	C	1828	30			ZX
324 BIGB	02	1850	1852	1905	N22	E85	.992	16341	9.2	15	-N	2	C	1852	60		A	ZX
325 BIGB	02	1938	1940	1953	N22	E89	.998	16341	9.5	15	-N	2	C	1940	20			ZX
326 BIGB	02	1944	1945	1959	N12	E62	.877	16336	7.5	15	-F	2	C	1945	60	1.3		ZX
327 BIGB	02	2031	2034	2053	S17	W40	.720	16324	29.9	22	-F	2	C	2034	40	.5		ZX
328 CULG	02	2102	2105	2110	N15	E14	.277	16337	3.9	8	-F		C	2105	80	.8	T	ZX
GRP78329	02	2119>9	2147+5	2155D	S23	W40	.756	16324	29.9	36	-F							
CULG	02	2119	2152	2229	S23	W40	.756	16324	29.9	70	1F		C	2152	260	3.9		
BIGB	02	2146	2147	2155	S23	W40	.699	16324	29.9	9	-F	2	C	2147	30	.4		
330 CULG	02	2125	2128	2133	N15	E14	.277	16337	3.9	8	-F		C	2128	80	.8	T	ZX
331 BIGB	02	2139	2145	2220	S26	W56	.894	16322	28.7	41	-N	2	C	2145	60	1.1		ZX

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONQ	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78332	02	2153+6	2204+3	2325	N13	E55	.814	16336	7.0	92	2N						IS	
CULG	02	2153	2207	2325	N12	E55	.814	16336	7.0	92	3N		P	2207	850	14.5	SI	
BIGB	02	2159	2204	2246D	N14	E55	.814	16336	7.0	47D	1B	2	P	2204	170	3.0		
333 CULG	02	2237E	2237U	2250U	N13	E16	.292	16337	4.1	13D	-N		P	2237	190	1.9	T	ZX
334 CULG	02	2248	2249	2255	N22	W74	.955	16315	27.4	15	-F		C	2249	40			ZX
335 CULG	02	2304	2305	2314	S23	W40	.756	16324	30.0	10	-F		C	2305	20	.3		ZX
336 CULG	02	2322	2325	2341	N15	W55	.814	16318	28.8	19	-N		C	2325	40	.7	S	ZX
337 CULG	02	2341	2344	2349	N02	E52	.788		6.9	8	-F		C	2344	20	.3		ZX
338 CULG	02	2343	2344	2359	N25	W75	.959	16315	27.4	16	-F		C	2344	40			ZX
339 CULG	03	0021	0028	0035	N20	W76	.964	16315	27.3	14	?N		P	0028	80			ZX
	IMP.1 NO 1 PURP																	
340 CULG	03	0159	0216	0226	N22	W75	.960	16315	27.5	27	?N		P	0216	80			ZX
	IMP.1 NO 1 PURP																	
GRP78341	03	0216+4	0223+0	0234	N14	E15	.284	16337	4.2	18	-N				100	1.0	D	
CULG	03	0216	0223	0237	N14	E15	.284	16337	4.2	21	-N		C	0223	100	1.1	T	
VORO	03	0220	0223	0230	N15	E15	.291	16337	4.2	10	-N		C	0223	108	1.1	D	
GRP78342	03	0237>9	0255+3	0308	N14	E14	.269	16337	4.2	31	1F				310	3.2	EJ	
CULG	03	0237	0255U	0307U	N14	E14	.269	16337	4.2	30D	1F		P	0255	400	4.0	T	
VORO	03	0253	0258	0308	N14	E14	.269	16337	4.2	15	1F		C	0258	215	2.2	EJ	
343 CULG	03	0255	0328U	0343U	S27	E16	.602	16334	4.3	48D	-F		P	0328	120	1.6	S	ZX
344 CULG	03	0325E	0328	0345D	N19	E08	.252	16337	3.7	20D	-N		P	0328	140	1.4		ZX
GRP78345	03	0831+3	0835+5	0855	S23	W44	.790	16324	30.1	24	1N				140	2.2		
HTPR	03	0831	0835	0850	S22	W45	.794	16324	30.0	19	-N		C	0835	100	1.4	E	
MONT	03	0832	0835	0856	S24	W44	.796	16324	30.1	24	-N		C	0835	180			
ATHN	03	0834	0837	0850D	S23	W40	.755	16324	30.4	16D	-B	3	C		111		FDE	
CATA	03	0835E	0840	0855D	S24	W44	.796	16324	30.1	20D	1B	2	P	0840	224	3.8		
346 HTPR	03	0835	0836	0842	N15	W52	.784	16325	29.5	7	-F		C	0836	20	.3		ZX
347 HTPR	03	0921	0925	0951	N14	E40	.643	16336	6.4	30	-F		C	0925	30	.4	E	ZX
348 HTPR	03	1010	1015	1030	N16	E10	.234	16337	4.2	20	-F		C	1015	20	.2		ZX
349 HTPR	03	1215E		1245	N15	E45	.706	16336	6.9	30D	-F		C	1219	20	.3	E	ZX
350 RAMY	03	1236	1238	1241	N19	E83	.988	16344	9.8	5	-F	3	C		11		DE	ZX
351 RAMY	03	1259	1304	1314	S25	W46	.817	16324	30.1	15	-F	3	C		17		DE	ZX
GRP78352	03	1358+3	1403	1417	N13	E10	.203	16337	4.3	19	-F				45	.5		
HTPR	03	1358E		1406D	N14	E13	.255	16337	4.6	8D	-N		C	1404	60	.6	E	
RAMY	03	1401	1403	1417	N13	E07	.163	16337	4.1	16	-F	3	C		25		FDE	
353 BIGB	03	1810	1812	1825	N15	E90	1.000	16344	10.5	15	-N	1	C	1812	20			ZX
354 BIGB	03	1828	1831	1839	N22	E72	.945	16341	9.2	11	-N	1	C	1831	10			ZX
	03	2241	0007	NO FLARE PATROL														
355 PURP	04	0025	0040	0052	N12	E48	.739	16336	7.6	27	1F		C					ZX
	04	0031	0035	NO FLARE PATROL														
356 PALE	04	0208	0211	0212	N13	W74	.956	16318	28.5	4	-F	3	C		12		F	ZX
357 PURP	04	0425	0436	0442	N24	W79	.976	16315	28.3	17	-N		C					ZX
GRP78358	04	0806	0826	0831	N15	E80	.981	16344	10.3	25	-N							
KANZ	04	0806	0826D	0830	N15	E78	.973	16344	10.2	24	-N	2						
HTPR	04	0828E	0828	0831	N15	E83	.989	16344	10.6	3D	-F		C	0828	30			
359 ISTA	04	0834	0835	0842	N18	E85	.993	16344	10.7	8	-F						E	ZX
360 KANZ	04	0927E	0927D	0927	S26	W74	.981	16322	28.8		-N	2					D	ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.		
GRP78361	04	0940+0	0944+3	0950	N13	E79	.978	16344	10.3	10	-F				40		E	
MONT	04	0940	0947	0949	N13	E79	.978	16344	10.3	9	-F		C	0947	50		E	
KANZ	04	0940	0947	0951	N14	E76	.965	16344	10.1	11	-F	2						
HTPR	04	0941E	0944	0950	N13	E80	.981	16344	10.4	9D	-F		C	0944	30			
GRP78362	04	1048+2	1051 1105	1200D	N11	E27	.455	16336	6.5	72	1N				250	2.8	EH	
KANZ	04	1034	1049	1049D	N14	E26	.448	16336	6.4	15D	1N	3						
MONT	04	1048	1051	1137D	N11	E28	.470	16336	6.6	49D	-N		C	1051	200		H	
HTPR	04	1049E		1051D	N08	E28	.466	16336	6.6	2D	1N		C	1051	300	3.3	E	
CATA	04	1050	1105	1200D	N11	E27	.455	16336	6.5	78D	1N	2	P	1105	224	2.6		
HTPR	04	1103E		1105D	N08	E28	.466	16336	6.6	2D	1N		C	1103	300	3.3	E	
	04	1200	1225	NO FLARE PATROL														
GRP78363	04	1235	1247	1255D	N22	E64	.895	16341	9.3	20	-N						U	
KANZ	04	1235	1247	1255	N24	E62	.881	16341	9.2	20	-N	3						
RAMY	04	1242E		1338	N20	E67	.915	16341	9.6	56D	-B	3	C		210		UDE	
364 RAMY	04	1332	1334	1346	S27	W71	.972	16324	29.2	14	-F	3	C		17			ZX
365 RAMY	04	1338	1340	1346	N11	E20	.346	16336	6.1	8	-F	3	C		39			ZX
GRP78366	04	1421+2	1425+1	1437	N17	E71	.939	16344	9.9	16	-N							
KANZ	04	1421	1425	1436	N14	E76	.965	16344	10.3	15	-N	1						
RAMY	04	1423	1426	1438	N20	E66	.908	16344	9.5	15	-B	3	C		29			
367 RAMY	04	1425E		1458	S27	W71	.972	16324	29.3	33D	-B	3	C				FDE	ZX
	04	1449	1504	NO FLARE PATROL														
368 RAMY	04	1510	1512	1545	S27	W71	.972	16324	29.3	35	-F	3	C					ZX
369 BIGB	04	1554	1607	1747	N14	E76	.965	16344	10.4	113	-B	2	C	1607	150		A	ZX
370 BIGB	04	1640	1646	1715	S23	W88	1.000	16322	28.1	35	-B	2	C	1646	70		A	ZX
GRP78371	04	1911+2	1913+0	1923	N25	E58	.851	16341	9.1	12	-F				35	.7		
BIGB	04	1911	1913	1926	N24	E60	.866	16341	9.3	15	-F	2	C	1913	50	1.0		
RAMY	04	1913	1913	1920	N27	E56	.837	16341	9.0	7	-N	3	C		23			
372 PALE	04	1928E	1929U	2015D	N17	E71	.939	16344	10.1	47D	-F	2	C		43			ZX
GRP78373	04	2103+1	2105+0 2111+2	2135	N26	E59	.860	16341	9.3	32	-B				50	1.0	F	
BIGB	04	2103	2113	2135	N24	E62	.881	16341	9.5	32	-B	1	C	2113	40	.9		
HOLL	04	2104	2105U	2108D	N27	E55	.829	16341	9.0	4D	-N	2	C		44			
RAMY	04	2104	2105	2125D	N27	E60	.869	16341	9.4	21D	-B	3	C		35			
PALE	04	2105E	2111	2130D	N25	E59	.859	16341	9.3	24D	-N	3	C		67		F	
GRP78374	04	2114>9	2129 2141	2147	S33	E73	.983	16348	10.4	33	-F						G	
BIGB	04	2114	2129	2151D	S36	E75	.990	16348	10.5	37D	-F	1	P	2129	80		G	
HOLL	04	2130	2141	2143	S31	E71	.976	16348	10.2	13	-F	2	C					
375 HOLL	04	2127	2131	2135	N18	E68	.921	16344	10.0	8	-F	2	C		25			ZX
376 HOLL	04	2151	2154	2235	N18	E67	.915	16344	9.9	44	-N	2	C		24		F	ZX
377 PALE	04	2202	2202U	2216D	N26	E58	.852	16341	9.3	14D	-N	3	C		78		F	ZX
	04	2205	2210	NO FLARE PATROL														
	04	2228	2231	NO FLARE PATROL														
378 PALE	04	2237	2253U	2309D	N17	E69	.927	16344	10.1	32D	-F	3	C		56		F	ZX
379 CULG	04	2315	2319	2330	N13	W62	.877	16345	30.3	15	-F		P	2319	40	.8		ZX
380 PALE	04	2315	2325	2327D	N17	E69	.927	16344	10.1	12D	?N	*	C		157		F	ZX
	IMP.1 NO * BIGB																	
	04	2359	0000	NO FLARE PATROL														
381 CULG	05	0008	0013	0025D	N14	E67	.915	16344	10.0	17D	?N		P	0013	200	4.8	L	ZX
	IMP.1 NO * PURP																	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78382	05	0208+2	0204+1	0212D	N14	E63	.885	16344	9.8	12	-N				80	1.8	H	
CULG	05	0200	0204	0212	N14	E64	.893	16344	9.9	12	1N		C	0204	100	2.2		
PALE	05	0202	0205	0255	N15	E63	.885	16344	9.8	53	-N	3	C		64		DE H	
383 CULG	05	0210	0235U	0312	S35	E75	.989	16348	10.7	62	?F		P	0235	120		FK	ZX
	IMP.1 NO : PURP PALE																	
384 PALE	05	0235	0238	0240	S25	W67	.953	16324	30.1	5	-F	3	C		26			ZX
385 PALE	05	0257	0321	0321D	N17	E65	.901	16344	10.0	24D	?N	3	C		126		DE	ZX
	IMP.1 NO : PURP																	
GRP78386	05	0311+2	0319 0342	0413D	S22	W70	.962	16324	29.9	62	-F						L	
CULG	05	0311U	0338U	0413U	S22	W70	.962	16324	29.9	62D	-F		P	0338	60			
PALE	05	0313	0319	0321D	S25	W68	.957	16324	30.0	8D	-F	3	C		23			
CULG	05	0342E	0342U	0345D	S16	W73	.969	16324	29.7	3D	1F		P	0342	80		L	
387 CULG	05	0326	0338	0404U	N19	W15	.329	16337	4.0	38D	-N		P	0338	110	1.2	SF	ZX
GRP78388	05	0555+5	0601+1	0609	N25	E54	.817	16341	9.3	14	-B						D	
PURP	05	0555	0601	0603	N25	E52	.798	16341	9.1	8	1N		C					
TACH	05	0600	0602	0614	N26	E56	.836	16341	9.5	14	-B		C	0602	44	.8	D	
389 KHAR	05	0735E	0735	0745D	N16	E65	.900	16344	10.2	10D	-N		P				E	ZX
390 KHAR	05	0812E		0834D	N17	E65	.901	16344	10.2	22D	-F		P				E	ZX
391 KHAR	05	0825E	0828	0847D	S35	E72	.983	16348	10.8	22D	?N		P				E	ZX
	IMP.1 NO : PURP																	
392 KHAR	05	0831E	0832	0834D	N26	E57	.844	16341	9.6	3D	-N		P				D	ZX
393 KHAR	05	0913E	0917	0923D	S35	E77	.993	16348	11.2	10D	-F		P					ZX
394 CATA	05	1040E	1040	1040D	N24	E39	.660	16341	8.4		-N	2	P	1040	140	1.9		ZX
	05	1100	1130	NO FLARE PATROL														
GRP78395	05	1130E	1142 1153	1240D	N14	E59	.852	16344	9.9	70	2N						EIK	
KHAR	05	1130E	1153	1240D	N14	E66	.908	16344	10.4	70D	2N		P	1153	270		EK	
KHAR	05	1130E	1142	1208D	N14	E52	.784	16344	9.4	38D	1F		P	1142	165	2.9	E	
HTPR	05	1201E		1237D	N15	E60	.861	16344	10.0	36D	2N		C	1204	300	6.0	BEI	
	05	1240	1242	NO FLARE PATROL														
396 HOLL	05	1410E	1421	1452	S28	W86	1.000	16324	29.1	42D	?B	3	C					ZX
	IMP.1 NO : RAMY																	
397 HOLL	05	1607	1609	1612	N27	E44	.725	16341	9.0	5	-F	3	C		30			ZX
398 HOLL	05	1619	1629	1706D	N18	E57	.835	16344	10.0	47D	-F	3	C		37			ZX
399 HOLL	05	1657	1701	1706D	N27	E44	.725	16341	9.0	9D	-F	3	C		31			ZX
400 HOLL	05	1739	1739	1746	N26	E47	.752	16341	9.3	7	-N	3	C		29			ZX
401 HOLL	05	1840	1844	1905	S29	W86	1.000	16324	29.3	25	-F	3	C					ZX
402 HOLL	05	1842	1913	1919	N17	E56	.825	16344	10.0	37	-N	3	C		36			ZX
GRP78403	05	2020+1	2022+1	2044	N14	E58	.843	16344	10.2	24	-B				50	1.0		
BIGB	05	2020	2023	2048	N14	E60	.860	16344	10.3	28	-B	2	C	2023	60	1.2		
HOLL	05	2021	2022	2039	N15	E56	.824	16344	10.0	18	-B	3	C		39		DE	
GRP78404	05	2024+0	2026+1	2044	S27	W83	.998	16324	29.6	20	-N							
HOLL	05	2024	2027	2034	S30	W86	1.000	16324	29.4	10	-N	3	C					
BIGB	05	2024	2026	2054	S24	W80	.994	16324	29.9	30	-B	1	C	2026	60			
GRP78405	05	2041>9	2103+4	2111	S15	E38	.687	16343	8.7	30	-F				30	.4	F	
HOLL	05	2041	2103	2113	S15	E38	.687	16343	8.7	32	-F	*	C		40			
PALE	05	2057	2107	2109	S16	E39	.703	16343	8.8	12	-F	*	C		23		F	
406 BIGB	05	2048	2054	2107	S36	E67	.969	16348	10.9	19	-N	1	C	2054	110			ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78407	05	2053+2	2057+1 2120	2126	N16	E55	.815	16344	10.0	33	-N				30	.5	F	
HOLL	05	2043	2057	2118	N17	E55	.816	16344	10.0	35	-N	*	C		31			
BIGB	05	2053	2057	2126	N15	E56	.824	16344	10.1	33	-N	*	C	2057	40	.7		
PALE	05	2055	2058	2108	N16	E53	.795	16344	9.8	13	-F	*	C		33		F	
PALE	05	2119	2120	2129	N16	E52	.785	16344	9.8	10	-F	*	C		39		F	
408 PALE	05	2119	2124	2128	N25	E42	.697	16341	9.0	9	-F	3	C		28		F	ZX
409 PALE	05	2141E	2205U	2216	N25	E42	.697	16341	9.1	35D	-F	3	C		24		DE	ZX
GRP78410	05	2154+3	2159>9	2217	S25	W85	1.000	16324	29.5	23	-N				25		J	
PALE	05	2154	2159	2217	S25	W78	.990	16324	30.1	23	-F	3	C		15			
HOLL	05	2157	2209	2216	S28	W87	1.000	16324	29.4	19	-N	3	C					
CULG	05	2202E	2204	2219	S22	W85	.999	16324	29.5	17D	-N		P	2204	30		J	
411 CULG	05	2202E	2207	2217	S17	W43	.750	16346	2.7	15D	-F		P	2207	30	.5		ZX
GRP78412	05	2203+2	2209+8	2245	N16	E54	.805	16344	10.0	42	-N				80	1.4		
PALE	05	2141E	2217U	2248	N16	E52	.785	16344	9.8	67D	-F	*	C		55		DE	
HOLL	05	2203	2209	2246	N18	E53	.797	16344	9.9	43	-N	*	C		66			
CULG	05	2205	2213	2236	N16	E55	.815	16344	10.0	31	-N	*	C	2213	100	1.7		
BIGB	05	2205	2212	2244	N15	E55	.815	16344	10.0	39	-N	*	C	2212	80	1.4		
GRP78413	05	2205+6	2212+5	2236	S34	E62	.946	16348	10.6	31	-N						L	
CULG	05	2205	2214	2236	S36	E59	.938	16348	10.3	31	2N		C	2214	320		L	
HOLL	05	2209	2212	2233	S32	E61	.937	16348	10.5	24	-N	3	C		52			
BIGB	05	2211	2213	2235	S36	E64	.958	16348	10.7	24	-N	1	C	2213	70	1.6		
PALE	05	2216E	2217U	2238	S33	E63	.949	16348	10.7	22D	-F	3	C		22		DE	
GRP78414	05	2218+9	2231+6 2254+3	2306	N25	E45	.729	16341	9.3	48	-N				50	.8	E	
PALE	05	2218E	2237U	2306	N25	E41	.686	16341	9.0	48D	-F	3	C		39		DE	
BIGB	05	2226	2231	2246	N25	E45	.729	16341	9.3	20	-B	1	C	2231	50	.7		
HOLL	05	2227	2232	2310	N25	E43	.708	16341	9.2	43	-N	3	C		72			
CULG	05	2251E	2257	2323	N25	E48	.759	16341	9.6	32D	-N		C	2257	80	1.2		
VORO	05	2252	2254	2303	N25	E48	.759	16341	9.6	11	-N		C	2254	72	1.1	E	
415 CULG	05	2304	2306	2318	N18	E50	.766	16344	9.7	14	-N		C	2306	20	.3		ZX
416 CULG	05	2308	2310	2315	S15	E36	.665	16343	8.7	7	-N		C	2310	40	.5		ZX
417 CULG	05	2309	2314	2334	S23	W80	.993	16324	30.0	25	-N		C	2314	30		J	ZX
418 CULG	05	2337	2344	2349	N12	E14	.256	16336	7.0	12	-F		C	2344	70	.7		ZX
419 CULG	05	2346	2349	2355	N15	E59	.852	16344	10.4	9	-F		C	2349	30	.6		ZX
GRP78420	05	2347+2	2349+2	0004	N27	E41	.694	16341	9.1	17	-N						V	
CULG	05	2347	2349	0008	N28	E42	.709	16341	9.1	21	-N		C	2349	110	1.5	V	
HOLL	05	2349	2351	0000	N26	E40	.679	16341	9.0	11	-N	3	C		31			
421 CULG	06	0008	0010	0016	N11	W05	.117	16336	5.6	8	-F		C	0010	40	.4	H	ZX
422 CULG	06	0055U	0105	0119	N10	W79	.978	16345	30.1	24D	-F		C	0105	30			ZX
423 CULG	06	0113	0122	0131	N16	E61	.869	16344	10.6	18	-F		C	0122	80	1.5		ZX
424 CULG	06	0116	0119	0126	S21	W42	.761	16346	2.9	10	-F		C	0119	70	1.1	T	ZX
425 CULG	06	0136	0141	0151	S24	W90	1.001	16324	29.3	15	-F		C	0141	60		T	ZX
426 CULG	06	0222	0248	0416	S21	W43	.770	16346	2.9	114	-F		C	0248	80	1.2	TK	ZX
GRP78427	06	0331+3	0336+2	0351	N25	E46	.739	16341	9.6	20	-N							
CULG	06	0331	0338	0359	N25	E45	.729	16341	9.5	28	-N		C	0338	140	2.0		
PURP	06	0334	0336	0343	N26	E48	.763	16341	9.7	9	1N		C					
428 CULG	06	0348	0400	0416	N09	W80	.982	16345	30.2	28	-N		C	0400	50			ZX
429 CULG	06	0416	0423	0429	S24	W90	1.001	16324	29.4	13	-F		C	0423	30		T	ZX
GRP78430	06	0425	0438+0	0453	S34	E58	.928	16348	10.5	28	1F							
CULG	06	0425	0438	0458	S35	E57	.926	16348	10.5	33	1N		C	0438	180	4.1		
PURP	06	0438E	0438	0447	S34	E60	.937	16348	10.7	9D	1F		P					
431 CULG	06	0444	0458	0513U	S21	W43	.770	16346	3.0	29D	?F		C	0458	160	2.4	T	ZX
	IMP.1 NO 1 PURP																	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
432 CULG	06	0445	0446	0453	S24	W90	1.001	16324	29.4	8	-N		C	0446	70		T	ZX
GRP78433	06	0452+8	0502 0512	0533	N16	E51	.775	16344	10.0	41	-N							
CULG	06	0452	0502	0540	N16	E50	.764	16344	10.0	48	1N		C	0502	160	2.6		
PURP	06	0500	0512	0526	N16	E53	.796	16344	10.2	26	-F		C					
434 CULG	06	0459	0504U	0552	S14	E32	.613	16343	8.6	53	-F		C	0504	30	.4		ZX
GRP78435	06	0532>9	0540 0552	0602	N25	E45	.729	16341	9.6	30	-F						U	
CULG	06	0532	0540	0603D	N25	E44	.719	16341	9.5	31D	-F		P	0540	140	2.0	U	
PURP	06	0542	0552	0601	N26	E47	.753	16341	9.8	19	-F		C					
GRP78436	06	0621+7	0628+4	0703	N25	E40	.675	16341	9.3	42	2N				410	5.7	FJ	
ABST	06	0621	0628	0710	N26	E40	.680	16341	9.3	49	1N		C	0628	175	2.5	FJ	
CULG	06	0624E	0632U	0646D	N24	E36	.626	16341	9.0	22D	2N		P	0632	410	5.7		
ISTA	06	0625E	0631U	0703	N25	E41	.686	16341	9.3	38D	2B						BF	
PURP	06	0628	0629	0655	N25	E43	.708	16341	9.5	27	2B		P		566	8.1		
GRP78437	06	0708+0	0706+4	0738	N14	E40	.643	16344	9.3	30	2N				550	7.3	FIJ	
ABST	06	0708	0706	0731	N15	E39	.632	16344	9.2	31	1F		P	0731	262	3.4	FJ	
ISTA	06	0708	0710	0728	N14	E42	.668	16344	9.4	28	2B	*					F	
HTPR	06	0704E		0740	N14	E37	.604	16344	9.1	36D	2N		C	0707	500	6.1	EI	
PURP	06	0708	0709	0728	N16	E44	.696	16344	9.6	20	2B	*	P		604	8.3		
GRP78438	06	0738+7	0744+4	0815	N25	E39	.664	16341	9.2	37	1B				200	2.7	FIJ	
ABST	06	0738	0744	0809	N27	E41	.695	16341	9.4	31	1N		C	0744	218	3.1	FJ	
HTPR	06	0740	0746	0830	N24	E35	.614	16341	8.9	50	1B		C	0746	200	2.4	EI	
ISTA	06	0743	0748	0825	N25	E39	.664	16341	9.2	42	2B						F	
PURP	06	0744	0746	0747	N16	E51	.775	16341	10.1	3	1N		P					
CATA	06	0745	0745	0810	N26	E38	.658	16341	9.2	25	1B	2	P	0745	168	2.3		
GRP78439	06	0841	0844	0856	N17	E54	.886	16344	10.4	15	-N						J	
HTPR	06	0841	0844	0901	N15	E53	.795	16344	10.3	20	-F		C	0844	30	.5	E	
ABST	06	0845E	0845	0850	N19	E56	.827	16344	10.6	5D	1N		P	0845	201	3.5	DJ	
440 HTPR	06	1109	1113	1124	N15	E41	.657	16344	9.5	15	-B		C	1113	140	1.9	E	ZX
441 LVOV	06	1202	1206	1226	S23	W50	.839	16346	2.8	24	?F		C	1206	150	2.8	DG	ZX
	IMP.1 NO : HTPR																	
442 HTPR	06	1304	1308	1325	N15	E45	.706	16344	9.9	21	-F		C	1308	20	.3	E	ZX
443 RAMY	06	1401	1402	1411	S23	W48	.823	16346	3.0	10	-N	3	C		19			ZX
GRP78444	06	1408>9	1409 1420	1424	N27	E35	.630	16341	9.2	16	-N						E	
RAMY	06	1408	1409	1423	N27	E33	.608	16341	9.1	15	-N	3	C		38			
LVOV	06	1418	1420	1424	N27	E38	.663	16341	9.4	6	1F		C	1420	150	2.1	E	
GRP78445	06	1411+6	1415 1425	1431	S23	W50	.839	16346	2.8	20	-F						DG	
LVOV	06	1411	1415	1424	S23	W52	.855	16346	2.7	13	-N		C	1415	100	1.8	DG	
RAMY	06	1417	1425	1438	S23	W48	.823	16346	3.0	21	-F	3	C		15			
446 WEND	06	1428E		1443	N25	E34	.608	16341	9.2	15D	-N		V					ZX
447 WEND	06	1428E		1440	N14	E49	.751	16344	10.3	12D	-F	*	V					ZX
GRP78448	06	1454+4	1500+1	1509	N14	E49	.751	16344	10.3	15	-N				50	.8		
WEND	06	1454	1500	1506	N14	E49	.751	16344	10.3	12	-N		V					
HOLL	06	1458	1500	1507	N15	E50	.763	16344	10.4	9	-N	3	C		29			
BIGB	06	1458	1501	1511	N13	E49	.751	16344	10.3	13	-N	1	C	1501	70	1.1		
HUAN	06	1500E		1510	N14	E50	.763	16344	10.4	10D	-N	1	P	1502	40	.6		
449 HUAN	06	1512		1518	N16	E47	.731	16344	10.2	6	-F	1	C					ZX
450 HUAN	06	1529E		1533D	N18	E53	.797	16344	10.6	4D	-F	1	P	1532	25	.4		ZX
GRP78451	06	1754+0	1755+0	1804	N25	E35	.619	16341	9.4	10	-N				40	.5	E	
HOLL	06	1754	1755	1804	N28	E35	.636	16341	9.4	10	-N	3	C		41			
BIGB	06	1754	1755	1826	N25	E35	.619	16341	9.4	32	-N	2	C	1755	50	.6		
HUAN	06	1755E		1802	N25	E35	.619	16341	9.4	7D	-N	1	P	1757	40	.5	E	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
452 BIGB	06	1859	1900	1911	N13	E49	.751	16344	10.5	12	-F	2	C	1900	20	.3		ZX
453 BIGB	06	1955	1959	2008	N09	E64	.894	16350	11.6	13	-N	2	C	1959	30	.7		ZX
GRP78454	06	1957+1	1959+1	2012	N25	E35	.619	16341	9.5	15	-N				50	.6	E	
HUAN	06	1957		2002	N25	E35	.619	16341	9.5	5	-N	1	C	1959	65	.8	E	
HOLL	06	1958	2000	2012	N27	E35	.630	16341	9.5	14	-B	3	C		61			
BIGB	06	1958	1959	2014	N24	E36	.626	16341	9.5	16	-N	2	C	1959	30	.4		
GRP78455	06	1959+1	2001+0	2009	S18	W52	.837	16346	2.9	10	-N				35	.6		
BIGB	06	1959	2001	2011	S19	W55	.865	16346	2.7	12	-N	2	C	2001	50	.9		
HOLL	06	2000	2001	2006	S18	W50	.820	16346	3.1	6	-N	3	C		24			
456 HOLL	06	2026	2028	2037	N27	E36	.641	16341	9.6	11	-B	3	C		90		DE	ZX
GRP78457	06	2030+2	2032+1	2041	S18	W52	.837	16346	3.0	11	-N				35	.6		
BIGB	06	2030	2033	2045	S19	W55	.865	16346	2.7	15	-N	2	C	2033	50	.9		
HOLL	06	2032	2032	2037	S18	W50	.820	16346	3.1	5	-N	3	C		18			
GRP78458	06	2045+2	2049+0	2100	N14	E44	.693	16344	10.2	15	-F							
CULG	06	2045	2049	2102U	N14	E44	.693	16344	10.2	170	-F		C	2049	100	1.4		
BIGB	06	2047	2049	2057	N14	E44	.693	16344	10.2	10	-F	2	C	2049	20	.3		
459 CULG	06	2122	2128	2137	S20	W57	.883	16346	2.6	15	-F		C	2128	20	.4		ZX
460 BIGB	06	2142	2143	2153	N14	E44	.693	16344	10.2	11	-F	2	C	2143	50	.7		ZX
461 CULG	06	2238	2241	2256	N10	E03	.080	16336	7.2	18	-F		C	2241	30	.3	T	ZX
462 CULG	06	2334	2338	2346	S20	W54	.860	16346	2.9	12	-F		C	2338	20	.4		ZX
GRP78463	07	0049+6	0057+1	0114	N14	E40	.643	16344	10.0	25	-N				110	1.5	EHJ	
CULG	07	0049	0058	0123	N14	E41	.656	16344	10.1	34	-N		C	0058	100	1.3		
VORO	07	0055	0057	0104	N14	E40	.643	16344	10.0	9	-B		C	0057	134	1.8	EHJ	
GRP78464	07	0117+2	0121+0	0130	N11	W01	.082	16336	7.0	13	-N				170	1.7	E	
CULG	07	0117	0121	0134	N11	W01	.082	16336	7.0	17	-F		C	0121	130	1.3		
VORO	07	0119	0121	0126	N11	W02	.087	16336	6.9	7	1N		C	0121	206	2.1	E	
465 CULG	07	0221	0224	0230	N15	E40	.645	16344	10.1	9	-N		C	0224	100	1.3		ZX
466 CULG	07	0255	0258	0305	N10	E00	.063	16336	7.1	10	-N		C	0258	40	.4		ZX
467 CULG	07	0443	0445	0449	N11	W02	.087	16336	7.0	6	-N		C	0445	60	.6		ZX
GRP78468	07	0458E	0502	0530	N16	E43	.684	16344	10.4	40	1N						D	
CULG	07	0450U	0502	0530U	N14	E41	.656	16344	10.3	400	1N		C	0502	160	2.1		
TACH	07	0509E		0525	N16	E43	.684	16344	10.4	16D	-N		C	0509	44	.6	BD	
PURP	07	0530E	0530	0533	N17	E44	.698	16344	10.5	3D	-F		P					
GRP78469	07	0510+3	0515+0	0522	S20	W64	.929	16346	2.4	12	-N				80		DJ	
CULG	07	0510	0515	0523	S19	W65	.933	16346	2.3	13	-N		C	0515	70	1.6	T	
TACH	07	0513	0515	0520	S21	W63	.925	16346	2.5	7	1N		C	0515	97		DJ	
GRP78470	07	0512+7	0523+1	0546	N11	E02	.087	16336	7.4	34	1N				250	2.5	HS	
CULG	07	0512	0523	0612	N11	E02	.087	16336	7.4	60	1N		C	0523	300	3.0	FSH	
TACH	07	0519	0524	0546	N11	E02	.087	16336	7.4	27	1F		C	0524	212	2.2	E	
PURP	07	0530E	0530	0533	N12	W08	.168	16336	6.6	3D	1N		P					
GRP78471	07	0517	0523	0537	N24	E28	.532	16341	9.3	20	-N							
CULG	07	0517	0523	0540	N25	E29	.550	16341	9.4	23	-N		C	0523	60	.7		
PURP	07	0530E	0530	0533	N24	E27	.520	16341	9.3	3D	-F		P					
472 CULG	07	0531	0545	0602	S19	W65	.933	16346	2.4	31	?N		C	0545	120	2.7	KT	ZX
	IMP.1	NO	PURP	TACH														
473 CULG	07	0610	0615	0627	S32	W46	.850	16334	3.8	17	-N		C	0615	80	2.4		ZX
474 CULG	07	0622	0625	0635	N25	E30	.562	16341	9.5	13	-N		C	0625	120	1.4		ZX
GRP78475	07	0622+7	0629+1	0638	S20	W60	.903	16346	2.8	16	1F							
CULG	07	0622	0629	0640	S19	W65	.933	16346	2.4	18	1N	*	C	0629	100	2.3	T	
PURP	07	0629	0630	0635	S22	W56	.881	16346	3.1	6	1F	*	C					
476 CULG	07	0701	0710	0727U	N24	E26	.508	16341	9.2	26D	-N		C	0710	60	.7	KT	ZX
477 TELV	07	0715	0716	0750	N13	W23	.400	16336	5.6	35	-N	3			24	.3		ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LON. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP DAY	MIN.		CONF.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.	
478 CULG	07	0721	0724	0735D	N17	E44	.698	16344	10.6	14D	-F		P	0724	40	.5	ZX
479 CULG	07	0733	0735D	0735D	N08	E59	.853	16350	11.7	2D	-N		P	0735	60	1.2	T ZX
480 CATA	07	0755	0810	0815D	N25	E27	.527	16341	9.4	20D	1B	2	P	0810	168	2.0	ZX
GRP78481	07	0940	0941	1129D	N15	W03	.158	16336	7.2	109	-N						DW
TELV	07	0940	0941	1129D	N14	W02	.136	16336	7.3	109D	-N	3			6		W
TELV	07	0941	0942	1129D	N17	W06	.210	16336	7.0	108D	-N	3			12	.1	W
KHAR	07	0953E	0953	1012D	N15	W03	.158	16336	7.2	19D	-F		P				D
GRP78482	07	0952	0952	1012	N11	W25	.425	16336	5.5	20	-B						D
TELV	07	0952	0952	1012	N11	W25	.425	16336	5.5	20	-B	3			54	.6	
KHAR	07	0953E	0953	1005D	N12	W25	.427	16336	5.5	12D	-F		P				D
GRP78483	07	1023	1026 1116+4	1129D	N11	W08	.159	16336	6.8	66	-F						W
TELV	07	1023	1026	1129D	N12	W10	.197	16336	6.7	66D	-N	3			20	.2	W
KHAR	07	1029E		1055D	N12	W09	.182	16336	6.8	26D	-F		P				
TELV	07	1116	1116	1129D	N10	W07	.136	16336	6.9	13D	-N	*			20	.2	
KHAR	07	1116E	1120	1123D	N11	W06	.130	16336	7.0	7D	-F	*	P				D
484 KHAR	07	1045E	1045	1049D	N13	E60	.861	16350	11.9	4D	-F		P				D ZX
GRP78485	07	1148E	1150 1242	1258	S20	W62	.916	16346	2.8	7D	-F						D
RAMY	07	1148E	1242	1258	S21	W60	.906	16346	3.0	70D	-N	3	C		35		
KHAR	07	1149E	1150	1203D	S20	W64	.929	16346	2.7	14D	-F		P				D
GRP78486	07	1149>9	1219+0	1233D	N10	W07	.136	16336	7.0	44	-N				180	1.8	E
RAMY	07	1149	1219	1305	N10	W06	.121	16336	7.0	76	-N	3	C		117		
LVOV	07	1217	1219	1233	N10	W08	.151	16336	6.9	16	1F		C	1219	250	2.6	E
GRP78487	07	1208+3	1213+2	1222	N16	E35	.582	16344	10.1	14	-F				35	.4	D
RAMY	07	1208	1215	1222	N16	E35	.582	16344	10.1	14	-N	3	C		22		
LVOV	07	1211	1213	1222	N17	E35	.585	16344	10.1	11	-F		C	1213	50	.7	D
488 RAMY	07	1227	1228	1251	N11	E56	.824	16350	11.7	24	-F	3	C		20		ZX
GRP78489	07	1310	1321	1337	N11	E56	.824	16350	11.7	27	-F						E
RAMY	07	1310	1321	1337	N11	E56	.824	16350	11.7	27	-F	3	C		32		
KHAR	07	1315E		1335D	N12	E57	.833	16350	11.8	20D	-F		P				E
490 RAMY	07	1319	1319	1334	N10	W08	.151	16336	7.0	15	-F	3	C		25		ZX
491 KHAR	07	1326E	1329	1335D	N27	E25	.522	16341	9.4	9D	-F		P				ZX
492 RAMY	07	1339	1339	1345	N11	W15	.268	16336	6.4	6	-F	3	C		30		ZX
493 RAMY	07	1354	1354	1403	N11	W09	.174	16336	6.9	9	-F	3	C		28		ZX
GRP78494	07	1405+0	1408+0 1434	1437	S20	W62	.916	16346	2.9	32	1B						
LVOV	07	1405	1408	1435	S20	W65	.934	16346	2.7	30	2N		C	1408	400		D
HOLL	07	1405	1408	1416D	S19	W59	.894	16346	3.2	11D	1B	2	C		117		DE
RAMY	07	1405	1408	1424	S21	W63	.925	16346	2.9	19	1B	3	C		187		DE
RAMY	07	1433	1434	1439	S21	W61	.912	16346	3.0	6	-F	3	C		16		
GRP78495	07	1405+2	1413+2	1435D	N16	E33	.555	16344	10.1	30	1B				330	4.0	FKU
RAMY	07	1405	1414	1631	N15	E33	.552	16344	10.1	146	1B	3	C		308		U F
HOLL	07	1406E	1413	1416D	N16	E35	.582	16344	10.2	10D	1B	2	C		225		U F
LVOV	07	1407	1415	1435	N17	E33	.558	16344	10.1	28	2N		C	1415	450	5.5	E
LVOV	07	1411	1413	1435	N16	E27	.471	16344	9.6	24	-F		C	1413	50	.6	DK
GRP78496	07	1414+0	1417+0	1442	N26	E23	.491	16341	9.3	28	-N						
RAMY	07	1414	1417	1449	N25	E21	.460	16341	9.2	35	-B	3	C		50		FOE
LVOV	07	1414	1417	1435	N27	E25	.522	16341	9.5	21	1F		C	1417	250	3.0	E
497 RAMY	07	1443	1446	1509	N10	W08	.151	16336	7.0	26	-N	3	C		34		ZX
498 BIGB	07	1453	1454	1459	N26	E25	.513	16341	9.5	6	-N	1	C	1454	60	.7	ZX
GRP78499	07	1525+4	1525+5	1544	N13	E49	.751	16350	11.3	19	-N						
RAMY	07	1525	1525	1542	N11	E53	.794	16350	11.6	17	-F	3	C		25		
BIGB	07	1529	1530	1546	N15	E46	.718	16350	11.1	17	-B	1	C	1530	80	1.2	
500 RAMY	07	1529	1529	1600	N13	W47	.728	16337	4.1	31	-N	3	C		57		ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
GRP78501	07	1614+1	1615+4	1629	N26	E25	.513	16341	9.6	15	-N				80	.9		
BIGB	07	1614	1615	1630	N26	E25	.513	16341	9.6	16	-N	1	C	1615	80	.9		
HOLL	07	1615	1619	1628	N27	E25	.522	16341	9.6	13	-N	3	C		89		DE	
GRP78502	07	1656+0	1656+2	1702	S20	W63	.923	16346	3.0	6	-N				40			
BIGB	07	1656	1657	1702	S19	W67	.944	16346	2.7	6	-N	1	C	1657	60			
RAMY	07	1656	1656	1702	S20	W63	.923	16346	3.0	6	-N	3	C		28			
HOLL	07	1656	1658	1702	S21	W63	.925	16346	3.0	6	-N	3	C		25			
GRP78503	07	1715+0	1715+0	1732	N13	W18	.324	16336	6.4	17	-N				50	.5		
RAMY	07	1715	1715	1735	N13	W18	.324	16336	6.4	20	-N	3	C		58		DE	
HOLL	07	1715	1715	1729	N14	W18	.330	16336	6.4	14	-N	3	C		54			
504 HOLL	07	1731	1731	1740	N23	E14	.365	16341	8.8	9	-N	3	C		49			ZX
505 HOLL	07	1843	1843	1852	N27	E17	.441	16341	9.1	9	-F	3	C		20			ZX
GRP78506	07	2058+0	2059 2108	2111	S21	W65	.936	16346	3.0	13	-F							
RAMY	07	2058	2108	2111	S23	W65	.939	16346	3.0	13	-F	3	C		14		DE	
HOLL	07	2058	2059	2111	S20	W66	.940	16346	2.9	13	-N	3	C		11			
507 CULG	07	2109	2122	2140	S35	E40	.829	16348	10.9	31	-F		C	2122	60	1.1		ZX
GRP78508	07	2112>9	2122 2136	2146	N26	E21	.470	16341	9.5	34	-N						K	
CULG	07	2112	2122	2148	N26	E21	.470	16341	9.5	36	-N		C	2122	60	.7	K	
BIGB	07	2134	2136	2143	N26	E21	.470	16341	9.5	9	-N	2	C	2136	20	.2		
GRP78509	07	2116+2	2121+1	2136	S19	W65	.933	16346	3.0	20	-N				50			
HOLL	07	2116	2122	2136	S19	W65	.933	16346	3.0	20	-B	3	C		38			
CULG	07	2116	2121	2130	S19	W71	.963	16346	2.6	14	-N		C	2121	60			
RAMY	07	2118	2122	0000D	S20	W65	.934	16346	3.0	162D	-N	3	C		44		DE	
510 CULG	07	2136	2145	2159	N08	E52	.783	16350	11.8	23	-N		C	2145	40	.6	F	ZX
511 BIGB	07	2230	2232	2237	N29	E90	.999	16357	14.7	7	-N	2	C	2232	30			ZX
GRP78512	07	2250+1	2252+3	2325	S19	W70	.959	16346	2.7	35	1B				90			
CULG	07	2250	2255	2325	S20	W74	.976	16346	2.4	35	1B	*	C	2255	220			
BIGB	07	2251	2254	2311	S18	W70	.957	16346	2.7	20	-B	*	C	2254	70			
HOLL	07	2251	2252	2328	S19	W66	.938	16346	3.0	37	-B	*	C		92			
GRP78513	08	0017+9	0027+1	0102	N22	E07	.293	16341	8.5	45	1N						JS	
CULG	08	0017	0028	0124	N22	E07	.293	16341	8.5	67	-N		C	0028	160	1.6	SF	
PURP	08	0025	0027	0102	N23	E07	.308	16341	8.5	37	1N	*	C					
VORO	08	0026	0027	0055	N22	E10	.315	16341	8.8	29	1F		C	0027	197	2.1	EJ	
514 PURP	08	0025		0132	N10	E50	.761	16350	11.8	67	-N		C					ZX
GRP78515	08	0033+3	0038+1	0048	S19	W72	.967	16346	2.6	15	-N				80		DH	
PURP	08	0033	0039	0045	S22	W74	.977	16346	2.5	12	1N		C					
CULG	08	0036	0038	0048	S19	W77	.985	16346	2.3	12	-B		C	0038	60			
BIGB	08	0036	0039	0044D	S18	W70	.957	16346	2.8	8D	-B	3	P	0039	60			
VORO	08	0036	0038	0048	S20	W70	.960	16346	2.8	12	1F		C	0038	134		DH	
GRP78516	08	0139+3	0147+0	0207	S19	W73	.971	16346	2.6	28	1F				100		DH	
CULG	08	0139	0147	0209	S19	W77	.985	16346	2.3	30	1F		C	0147	80			
VORO	08	0142	0147	0204	S20	W70	.960	16346	2.8	22	1F		C	0147	116		DH	
517 CULG	08	0153	0157	0206	N28	E18	.463	16341	9.4	13	-F		C	0157	20	.2		ZX
518 VORO	08	0238	0239	0245	N12	E19	.335	16344	9.5	7	?F		C	0239	197	2.2	EH	ZX
	IMP.1 NO ! MITK PURP																	
519 CULG	08	0343	0349	0415	S20	W75	.979	16346	2.5	32	?N		C	0349	100		K	ZX
	IMP.1 NO ! MITK PURP																	
GRP78520	08	0713+3	0716+2	0722	N28	E15	.437	16341	9.4	9	-N				110	1.2	J	
ABST	08	0713	0716	0721	N29	E16	.458	16341	9.5	8	-N		C	0716	114	1.3	FJ	
TACH	08	0716	0718	0722	N28	E15	.437	16341	9.4	6	-B		C	0718	106	1.2	E	
KHAR	08	0720E	0720	0724D	N28	E15	.437	16341	9.4	4D	-F		P				BD	
521 KHAR	08	0720E		0808D	N10	E46	.715	16350	11.8	48D	-F		P				D	ZX
522 ABST	08	0752E	0801	0829	N16	W23	.415	16336	6.6	37D	-F		P	0801	87	1.0	E	ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78523	08	0815+7	0826	0841	S22	W75	.980	16346	2.7	26	-F						E	
BUCA	08	0815		0825	S23	W70	.963	16346	3.1	10	-F		C	0819	32		D	
MONT	08	0822	0826	0841	S22	W76	.983	16346	2.6	19	-F		C	0826	50		E	
KHAR	08	0825E		0915D	S18	W75	.978	16346	2.7	50D	1F		P	0830			E	
BUCA	08	0826		0829	S25	W69	.961	16346	3.2	3	-F		C	0826	32		D	
524 KHAR	08	0850	0909	0924	N20	E90	.999	16357	15.1	34	-N		P	0909			T	ZX
525 KHAR	08	0932	0937	1035D	N20	E90	.999	16357	15.1	63D	-F		P	0935			T	ZX
526 KHAR	08	1018E		1040	N08	E46	.715	16350	11.9	22D	-F		V	1018			E	ZX
527 KHAR	08	1030		1040	N16	E27	.472	16344	10.5	10	-F		V	1032			D	ZX
528 KANZ	08	1055	1058	1110	N16	W28	.486	16336	6.4	15	-N	1						ZX
GRP78529	08	1100E	1116 1209	1212	N28	E88	.997	16357	15.1	72	1N						H	
KHAR	08	1100E	1116	1217	N20	E88	.998	16357	15.1	77D	1N		V	1119			HT	
KANZ	08	1122E	1122	1134	N28	E90	.999	16357	15.2	12D	-N	2						
RAMY	08	1207	1209	1212	N29	E85	.992	16357	14.9	5	-F	3	C					
GRP78530	08	1153	1155+2 1209	1225	S20	W80	.992	16346	2.5	32	1N				110		OK	
LVOV	08	1153	1157	1230	S21	W80	.993	16346	2.5	37	1N		C	1157	100		OK	
KHAR	08	1155E	1155	1225D	S18	W80	.992	16346	2.5	30D	-N		P	1206	120			
RAMY	08	1200E	1209	1217	S20	W69	.955	16346	3.3	17D	-F	3	C					
531 RAMY	08	1201	1206	1208	S30	W56	.905	16334	4.3	7	-F	3	C		14			ZX
532 LVOV	08	1403	1404	1408	S21	W84	.998	16346	2.3	5	?N		C	1404	100		D	ZX
	IMP.1 NO : RAMY BERN																	
GRP78533	08	1417+4	1422+3	1438	S19	W75	.978	16346	3.0	21	-N							
KANZ	08	1417	1425	1433D	S19	W77	.985	16346	2.8	16D	-B	2						
HOLL	08	1421	1422	1438	S20	W73	.972	16346	3.1	17	-N	3	C					
GRP78534	08	1509+0	1509+1	1526	N23	E85	.992	16357	15.0	17	-F							
HOLL	08	1509	1509	1538	N22	E85	.993	16357	15.0	29	-F	3	C					
RAMY	08	1509	1510	1514	N24	E85	.992	16357	15.0	5	-F	3	C					
GRP78535	08	1535+0	1536+1	1543	S21	W71	.965	16346	3.3	8	-N							
HOLL	08	1535	1536	1545	S21	W75	.980	16346	3.0	10	-N	3	C					
RAMY	08	1535	1537	1540	S21	W68	.951	16346	3.5	5	-N	3	C		11			
GRP78536	08	1637+4	1645+3	1704	S21	W74	.976	16346	3.1	27	-N						A	
HOLL	08	1637	1648	1704	S21	W74	.976	16346	3.1	27	1N	3	C					
RAMY	08	1638	1645	1705	S21	W71	.965	16346	3.4	27	-N	3	C					
BIGB	08	1641	1647	1704	S19	W85	.999	16346	2.3	23	-B	3	C	1647	70		A	
537 BIGB	08	1657	1700	1720	N27	E90	.999	16357	15.5	23	-N	*	C	1700	20			ZX
GRP78538	08	1705+0	1706+2	1738	N14	W26	.449	16336	6.8	33	-N				130	1.5	F	
RAMY	08	1705	1706	1738	N14	W25	.434	16336	6.8	33	-N	3	C		100		F	
BIGB	08	1705	1708	1730	N14	W26	.449	16336	6.8	25	-N	3	C	1708	100	1.1		
HOLL	08	1705	1708	1738	N13	W26	.446	16336	6.8	33	-N	3	C		184			
GRP78539	08	1719+2	1723+0	1730	N20	E85	.993	16357	15.1	11	-F						A	
BIGB	08	1719	1723	1730	N19	E80	.980	16357	14.7	11	-N	*	C	1723	50		A	
RAMY	08	1721	1723	1730	N21	E90	.999	16357	15.5	9	-F	*	C					
GRP78540	08	1852+1	1857+0	1904	S18	W76	.981	16346	3.1	12	-N						A	
BIGB	08	1852	1857	1903	S18	W85	.999	16346	2.4	11	-B	3	C	1857	30		A	
RAMY	08	1853	1857	1904D	S19	W68	.949	16346	3.7	11D	-N	3	C					
541 HOLL	08	1933	1937	2000	S23	W77	.987	16346	3.0	27	?B	3	C					ZX
	IMP.1 NO : BIGB																	
542 BIGB	08	1935	1937	1952	S19	E85	.999	16358	15.2	17	-B	3	C	1937	70		A	ZX
543 BIGB	08	1954	2001	2006	N25	E90	.999	16357	15.6	12	-B	3	C	2001	60			ZX
544 BIGB	08	2048	2049	2052	S18	E87	1.000	16358	15.4	4	-B	3	C	2049	20		A	ZX
545 CULG	08	2048	2049	2058	S20	W90	1.001	16346	2.1	10	-N		C	2049	50			ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq Deg.		
GRP78546	08	2249>9	2313+1	2334	S19	W85	.999	16346	2.6	45	1F				80		H	
CULG	08	2249	2313	2344	S20	W90	1.001	16346	2.2	55	-N		C	2313	60		F	
VORO	08	2310	2314	2323	S18	W80	.992	16346	3.0	13	1F		C	2314	108		DH	
547 VORO	08	2258	2302	2316	N26	E03	.340	16341	9.2	18	?F		C	2302	224	2.4	EJ	ZX
	IMP.1 NO : BIGB CULG																	
548 BIGB	08	2310	2314	2319	S17	E90	1.001	16358	15.7	9	-N	3	C	2314	20			ZX
549 CULG	09	0213	0217	0224	S17	W80	.991	16346	3.1	11	-F		C	0217	60		T	ZX
550 VORO	09	0227	0228	0230	N15	E12	.253	16344	10.0	3	-N		C	0228	90	1.0	EJ	ZX
551 CULG	09	0417	0420	0426	S20	W90	1.001	16346	2.4	9	-F		C	0420	60		T	ZX
552 CULG	09	0512	0517	0522	N21	E80	.980	16357	15.2	10	-F		C	0517	60			ZX
GRP78553	09	0601+7	0603 0611	0630	N16	E09	.227	16344	9.9	29	-N						DJ	
PURP	09	0601	0603	0635	N16	E09	.227	16344	9.9	34	1F		C					
ABST	09	0608	0611	0625	N16	E10	.238	16344	10.0	17	-N		C	0611	87	.9	DJ	
554 CULG	09	0621	0622	0626	S20	W90	1.001	16346	2.5	5	-F		C	0622	30		T	ZX
GRP78555	09	0654+5	0656+5 0720	0756	N15	E10	.227	16344	10.0	62	1N						EIJOZ	
ABST	09	0654	0656	0730	N15	E14	.280	16344	10.3	36	-N		C	0656	131	1.4	DJ	
TELV	09	0655	0656	0718D	N16	E13	.276	16344	10.3	23D	-N	3			122	1.3		
CULG	09	0656U	0720	0736E	N15	E08	.203	16344	9.9	40D	1N		P	0720	360	3.6	ZIF	
TELV	09	0656	0657	1014	N15	E03	.160	16344	9.5	198	-B	3			20	.2		
TACH	09	0658E		0720	N16	E14	.289	16344	10.3	22D	2F		V	0658	566	6.1	BCEJZ	
PURP	09	0659	0701	0738	N16	E08	.216	16344	9.9	39	1N		C					
BUCA	09	0703		0754	N16	E09	.227	16344	10.0	51	1F		C	0708	322	3.4		
HTPR	09	0733E		0817D	N15	E10	.227	16344	10.1	44D	-F		C	0808	60	.6	EI	
KHAR	09	0745E		0840D	N16	E09	.227	16344	10.0	55D	1F		P	0755			BEO	
GRP78556	09	0745+0	0752	0812	N09	E90	1.000	16363	16.1	27	-F						HO	
KHAR	09	0745E		0810D	N09	E90	1.000	16363	16.1	25D	-F	*	P	0745			HO	
HTPR	09	0745	0752	0812	N10	E90	1.000	16363	16.1	27	-N	*	C	0752	50			
557 KHAR	09	0745E		0755D	S17	W90	1.001	16346	2.6	10D	-F		P				HO	ZX
558 KHAR	09	0822	0825	0840	N11	E32	.529	16350	11.7	18	-F		P	0825			DH	ZX
559 KHAR	09	0846E		0853D	N11	E32	.529	16350	11.8	7D	-F		C				D	ZX
GRP78560	09	0848+1	0850	0905	N25	E83	.988	16357	15.6	17	-F						H	
HTPR	09	0848		0852D	N25	E80	.979	16357	15.4	4D	-N		C	0850	60			
KHAR	09	0849	0850	0905	N26	E86	.994	16357	15.8	16	-F		P	0850			H	
561 KHAR	09	0916E	0920	0926D	N11	E32	.529	16350	11.8	10D	-F		C					ZX
GRP78562	09	0933+5	0934+6	0950	N15	E14	.280	16344	10.4	17	-F				70	.7	DJO	
KHAR	09	0933	0934	0950D	N17	E14	.299	16344	10.4	17D	-F	*	P	0938	50	.5	DO	
ABST	09	0938	0940	0950	N14	E14	.272	16344	10.5	12	-N	*	C	0940	87	.9	DJ	
563 KHAR	09	1003E	1004	1014D	S10	W64	.912	16355	4.6	11D	-F		P	1012			DT	ZX
564 KHAR	09	1018E		1035D	N11	E32	.529	16350	11.8	17D	-F		P	1025	30	.4	DHO	ZX
565 KHAR	09	1021E		1035D	S10	W63	.905	16355	4.7	14D	-F		P	1021			HTO	ZX
GRP78566	09	1025+4	1033+4	1101	N16	E10	.238	16344	10.2	36	-F				80	.8	E	
HTPR	09	1025	1033	1100	N15	E10	.227	16344	10.2	35	-F		C	1033	20	.2	E	
KANZ	09	1028	1036	1056	N16	E11	.250	16344	10.3	28	-N	2					E	
MONT	09	1028	1037	1102D	N17	E11	.262	16344	10.3	34D	-N		C	1037	80		E	
KHAR	09	1029	1035	1107D	N16	E10	.238	16344	10.2	38D	-F		P	1035	80	.8	E	
GRP78567	09	1127+0	1127+0	1140	N22	W10	.316	16341	8.7	13	-F						D	
HTPR	09	1127	1127	1140	N22	W09	.308	16341	8.8	13	-F		C	1127	20	.2		
KHAR	09	1127	1127	1137D	N23	W11	.339	16341	8.7	10D	-F		C				D	
568 KHAR	09	1135E		1150D	S17	W90	1.001	16346	2.7	15D	-F		V				H	ZX
GRP78569	09	1140>9	1245	1252	N27	E81	.982	16357	15.6	72	-F						H	
KHAR	09	1140E		1250D	N30	E82	.985	16357	15.6	70D	-N		P	1155			H	
HTPR	09	1235	1245	1252	N25	E80	.979	16357	15.5	17	-F		C	1245	20			

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78570	09	1141+0	1142+2	1153	S11	W60	.884	16355	5.0	12	-F				20	.4	H	
HTPR	09	1141	1142	1150	S11	W60	.884	16355	5.0	9	-F		C	1142	10	.2		
RAMY	09	1141	1144	1155	S12	W57	.862	16355	5.2	14	-N	3	C		27			
KHAR	09	1142E		1150D	S11	W64	.914	16355	4.7	8D	-F		P	1150			HT	
571 KHAR	09	1214	1214	1220D	S11	W64	.914	16355	4.7	6D	-F		C				DT	ZX
572 KHAR	09	1218E		1224D	N10	E90	1.000	16363	16.3	6D	-F		V				H	ZX
573 KHAR	09	1225E		1230D	S17	W90	1.001	16346	2.8	5D	-F		V				H	ZX
574 HTPR	09	1346	1347	1356	N26	W01	.338	16341	9.5	10	-F		C	1347	20	.2	E	ZX
GRP78575	09	1407+1	1408+1	1416	N29	E78	.972	16357	15.4	9	-N							
HTPR	09	1407	1408	1417	N27	E80	.979	16357	15.6	10	-N		C	1408	40			
RAMY	09	1408	1409	1414	N32	E76	.965	16357	15.3	6	-N	3	C					
576 HOLL	09	1424	1424	1440	S11	W67	.933	16355	4.6	16	-N	2	C		40			ZX
GRP78577	09	1429+2	1434+1	1458	S13	W10	.370	16343	8.9	29	-F				25	.3		
HTPR	09	1429	1434	1500	S14	W11	.391	16343	8.8	31	-F		C	1434	20	.2	E	
RAMY	09	1431	1435	1455	S13	W10	.370	16343	8.9	24	-N	3	C		30		F	
578 HOLL	09	1453	1455	1458	N10	W47	.727	16336	6.1	5	-F	3	C		24			ZX
579 RAMY	09	1453	1455	1505	N18	E00	.203	16344	9.6	12	-F	3	C		40			ZX
580 HOLL	09	1547	1551	1553	S11	W62	.899	16355	5.0	6	-F	3	C		21			ZX
581 BIGB	09	1646	1648	1658	N14	E83	.990	16363	15.9	12	-B	1	C	1648	40			ZX
582 RAMY	09	1646	1649	1705	N11	W78	.975	16337	3.8	19	-F	3	C		49			ZX
583 HOLL	09	1648	1656	1711	S11	W63	.907	16355	5.0	23	-F	3	C		18			ZX
584 RAMY	09	1706	1709	1715	N11	E27	.455	16350	11.7	9	-F	3	C		25			ZX
585 BIGB	09	1828	1831	1835	S11	W65	.920	16355	4.9	7	-N	3	C	1831	60			ZX
586 HOLL	09	1929	1931	1939	N17	E04	.198	16344	10.1	10	-N	3	C		34			ZX
587 BIGB	09	2007	2010	2020	N13	W41	.655	16336	6.8	13	-N	2	C	2010	20	.3		ZX
588 CULG	09	2058	2108	2138	S15	W20	.486	16343	8.4	40	-F		C	2108	50	.6		ZX
589 BIGB	09	2120	2121	2132	N27	E75	.960	16357	15.5	12	-N	2	C	2121	20			ZX
GRP78590	09	2120+2	2124+2	2206	N16	E03	.176	16344	10.1	46	-B						F	
CULG	09	2120	2126	2215D	N16	E03	.176	16344	10.1	55D	1B		C	2126	340	3.4	F	
HOLL	09	2122	2124	2204	N17	E03	.193	16344	10.1	42	-N	3	C		170			
BIGB	09	2122	2126	2206	N15	E05	.174	16344	10.3	44	-B	2	C	2126	50	.5		
GRP78591	09	2147+1	2151+0	2157	N28	E78	.972	16357	15.8	10	-N				40			
CULG	09	2147	2151	2156	N29	E79	.976	16357	15.8	9	-N		C	2151	50			
BIGB	09	2148	2151	2157	N28	E77	.969	16357	15.7	9	-N	3	C	2151	30			
592 CULG	09	2203	2211	2215D	N16	W29	.500	16336	7.7	12D	-F		P	2211	120	1.4		ZX
593 CULG	09	2223U	2225	2234	N29	E79	.976	16357	15.9	11D	-N		C	2225	50			ZX
594 CULG	09	2312	2316	2321	S28	W90	1.001	16346	3.2	9	-F		C	2316	20			ZX
595 BIGB	09	2317	2318	2324	S10	W70	.949	16355	4.7	7	-N	3	C	2318	40			ZX
596 CULG	09	2317	2323	2331	N13	W08	.180	16344	9.4	14	-F		C	2323	80	.8	H	ZX
GRP78597	09	2335+9	2345+0	2359	N08	E89	.999	16363	16.7	24	-F				60		F	
CULG	09	2335	2345	0006	N04	E88	.999	16363	16.6	31	1F		C	2345	80		F	
BIGB	09	2344	2345	2351	N13	E90	1.000	16363	16.7	7	-F	3	C	2345	40			
598 YUNN	10	0050	0110	0115	S05	W21	.403	16361	8.5	25	-N		C		80	.9		ZX
599 YUNN	10	0108	0110	0122	S10	W68	.938	16355	4.9	14	?F		C		80			ZX
	IMP.1 NO I VORO PURP																	
600 CULG	10	0606	0612U	0631U	N04	E13	.227	16350	11.2	25D	-F		P	0612	60	.6		ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS AREA Millionths of Disk	CORR AREA Sq. Deg.		
601 CULG	10	0646	0649	0654	N18	W18	.361	16341	8.9	8	-F		C	0649	30	.3		ZX
602 PURP	10	0655	0700	0724	N05	E13	.225	16350	11.3	29	?F		C				G	ZX
	IMP.1 NO ; TACH																	
603 PURP	10	0748E	0748	0752	N29	E74	.956	16357	15.9	4D	?N		C					ZX
	IMP.1 NO ; TACH			BERN														
604 KHAR	10	0844E	0846	0910D	S11	W90	1.000	16355	3.6	26D	-N		P	0846			HOT	ZX
605 TELV	10	0845	0846	0914	N19	E01	.222	16344	10.4	29	-N	1			9	.1		ZX
606 KHAR	10	0901E		0950D	N12	E18	.320	16350	11.7	49D	-F		P	0901			E	ZX
GRP78607	10	1007+0	1014	1038	N26	E67	.918	16357	15.4	31	-N						E	
			1025															
WEND	10	1007		1024	N28	E68	.925	16357	15.5	17	-F		V		70			
MONT	10	1007	1034	1045	N25	E66	.911	16357	15.4	38	-F		C	1034	50		E	
KHAR	10	1008E	1014	1100D	N26	E68	.924	16357	15.5	52D	1N		P	1012	220		E	
CATA	10	1015E	1025	1030D	N26	E63	.891	16357	15.2	15D	1N	2	P	1025	112	2.5		
608 KHAR	10	1010E		1020D	S11	W90	1.000	16355	3.7	10D	-F		P	1016			HT	ZX
609 KHAR	10	1020E		1028D	N18	W16	.335	16341	9.2	8D	-F		P	1020			D	ZX
610 KHAR	10	1042E		1100D	N16	W26	.458	16341	8.5	18D	-F		P	1042			H	ZX
GRP78611	10	1043	1047	1121	N15	W07	.193	16344	9.9	38	-B						H	
			1054															
TELV	10	1043	1047	1118	N16	W02	.173	16344	10.3	35	-N	1			32	.3		
TELV	10	1044	1054	1121	N15	W12	.254	16344	9.5	37	-B	1			2			
KHAR	10	1053E		1100D	N16	W04	.183	16344	10.2	7D	-F		V	1053			H	
KHAR	10	1113E		1118D	N12	W14	.258	16344	9.4	5D	-F		P	1115				
612 KHAR	10	1123E	1123	1126D	N11	E16	.284	16350	11.7	3D	-F		C				D	ZX
GRP78613	10	1151+3	1154+3	1208	N27	W20	.472	16341	9.0	17	-N				50	.6	H	
KHAR	10	1151	1154	1206	N27	W22	.492	16341	8.8	15	-N		P	1155			E	
TELV	10	1152	1154	1212	N26	W20	.461	16341	9.0	20	-N	1			49	.5		
RAMY	10	1154	1154	1208	N27	W20	.472	16341	9.0	14	-N	3	C		26		F	
CATA	10	1155E	1155	1155D	N27	W20	.472	16341	9.0		-N	2	P	1155	56	.6		
KHAR	10	1155E	1157	1204D	N17	W20	.380	16341	9.0	9D	-F		V	1157			H	
GRP78614	10	1503+1	1504+0	1516	N15	W06	.183	16344	10.2	13	-F				90	.9	F	
HOLL	10	1503	1504	1514	N15	W06	.183	16344	10.2	11	-F	3	C		72			
RAMY	10	1504	1504	1517	N15	W07	.193	16344	10.1	13	-N	3	C		120		F	
615 RAMY	10	1531	1531	1543	S15	W26	.550	16343	8.7	12	-F	3	C		22			ZX
GRP78616	10	1540+0	1540+5	1601	N29	E64	.901	16357	15.5	21	-N				40			
HOLL	10	1540	1545	1604	N29	E57	.850	16357	14.9	24	-F	3	C		57			
BIGB	10	1540	1542	1556	N27	E68	.925	16357	15.8	16	-N	3	C	1542	40			
RAMY	10	1540	1540	1601	N30	E64	.902	16357	15.5	21	-N	3	C		25			
617 RAMY	10	1552	1553	1601	S14	W27	.553	16343	8.6	9	-F	3	C		30			ZX
618 HOLL	10	1703	1704	1714	N11	E13	.237	16350	11.7	11	-F	3	C		25			ZX
619 HOLL	10	1722	1724	1732	N19	W04	.231	16344	10.4	10	-N	3	C		93			ZX
620 HOLL	10	1737	1745	1748	N30	E65	.908	16357	15.6	11	-F	3	C		30			ZX
621 BIGB	10	1905	1906	1919	N10	E13	.232	16350	11.8	14	-F	3	C	1906	30	.3		ZX
622 HOLL	10	1913	1944U	2011	N32	E63	.898	16357	15.5	58	-N	3	C		43			ZX
623 HOLL	10	2035	2045	2108	N16	W08	.217	16344	10.3	33	-F	3	C		36			ZX
624 HOLL	10	2120	2120	2133	S16	W28	.581	16343	8.8	13	-F	3	C		20			ZX
625 HOLL	10	2259	2308	2359	N16	W13	.277	16344	10.0	60	-N	3	C		86		F	ZX
626 HOLL	10	2323	2325	2354	S12	W33	.609	16343	8.5	31	-F	3	C		25			ZX
627 HOLL	10	2333	2334	2343	N11	E10	.190	16350	11.7	10	-N	3	C		36			ZX
628 HOLL	10	2348	2348	2355	N10	E10	.184	16350	11.7	7	-N	3	C		52			ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP DAY	MIN.		CONQ	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
629 HOLL	11	0001	0001	0011	N11	W56	.824	16336	6.8	10	-N	2	C		22		ZX
GRP78630	11	0008+0	0010+5	0020	N15	W13	.268	16344	10.0	12	-F				30	.3	
HOLL	11	0008	0015	0016	N15	W14	.281	16344	10.0	8D	-F	2	C		31		
MANI	11	0008E	0010	0020	N15	W13	.268	16344	10.0	12D	-F	3	C		25		
631 MANI	11	0105E	0106	0115	N26	W26	.526	16341	9.1	10D	-F	3	C		15		ZX
632 PURP	11	0433	0445	0500	N25	E53	.809	16357	15.2	27	1N		P				ZX
633 PURP	11	0547	0600	0610	N11	W02	.091	16350	11.1	23	?F		C				ZX
	IMP.1 NO ! MTK																
GRP78634	11	0640>9	0650+3 0718	0731	N12	W01	.103	16350	11.2	51	-N						DJ
PURP	11	0640	0650	0725	N10	W03	.084	16350	11.1	45	1B		C				
ATHN	11	0651	0653	0725	N11	E02	.091	16350	11.4	34	-N	1		0653	147	1.4	
WEND	11	0655E		0726	N13	W03	.130	16350	11.1	31D	1N		V		250	2.7	B
TELV	11	0701E		0741	N12	W01	.103	16350	11.2	40D	-N	3			163	1.6	
ABST	11	0714	0718	0742	N13	E01	.120	16350	11.4	28	-N		C	0718	87	.9	DJ
635 WEND	11	0712		0723	N27	W33	.611	16341	8.8	11	-F		V				D ZX
636 ABST	11	0844	0846	0852	N14	W61	.870	16336	6.8	8	-F		C	0846	87		D ZX
637 KANZ	11	0904	0906	0917	N13	E02	.124	16350	11.5	13	-F	2					ZX
GRP78638	11	0904	0913+5	0943	S14	W36	.656	16343	8.7	39	-N						EL
KANZ	11	0904	0913	0936	S13	W36	.650	16343	8.7	32	-N	2					E
KHAR	11	0915E	0918	0950	S15	W36	.662	16343	8.7	35D	1N		P	0918	160	2.2	EL
639 TELV	11	0950	0951	1020	N26	E41	.692	16357	14.5	30	-N	3			24	.3	ZX
640 KHAR	11	1045E		1049	N28	W33	.617	16341	9.0	3D	-F		P	1046	30	.4	ZX
GRP78641	11	1143+3	1145+3	1208	N13	W03	.130	16350	11.3	25	-N				80	.8	
TELV	11	1143	1145	1146	N12	W02	.107	16350	11.3	3D	-N	3			24	.3	
KANZ	11	1144	1148	1203	N12	W03	.114	16350	11.3	19	-N	2					
LVOV	11	1146	1148	1203	N14	W04	.152	16350	11.2	17	-F		C	1148	80	.9	D
KHAR	11	1146	1148	1217	N13	W03	.130	16350	11.3	31D	-N		P	1149	180	1.8	E
RAMY	11	1146	1146	1220	N12	W03	.114	16350	11.3	34	-N	3	C		81		
WEND	11	1145E		1203	N14	W04	.152	16350	11.2	17D	-N		V		150	1.6	
GRP78642	11	1152+4	1200+7	1226	N09	E62	.878	16363	16.1	34	-N				90	1.9	ELM
KHAR	11	1152E	1202	1217	N10	E63	.886	16363	16.2	25D	-F		P	1202	100		ELM
WEND	11	1155	1207	1226	N09	E64	.894	16363	16.3	31	1N		V		100	2.4	
KANZ	11	1156	1207	1226	N08	E62	.879	16363	16.1	30	-N	2					
CATA	11	1200E	1200	1205	N10	E62	.878	16363	16.2	5D	-N	2	P	1200	56	1.2	
643 RAMY	11	1258	1258	1304	S14	W39	.690	16343	8.6	6	-N	3	C		21		ZX
GRP78644	11	1302+0	1310 1346	1356	N15	W16	.309	16344	10.3	54	1N						FL
RAMY	11	1302	1310	1402	N15	W15	.295	16344	10.4	60	1N	3	C		268		F
WEND	11	1302		1338	N16	W16	.317	16344	10.3	36	1N		V		450	5.0	FL
HOLL	11	1336	1346	1356	N14	W17	.317	16344	10.3	20	-F	3	C		27		
645 RAMY	11	1356	1357	1401	S32	E39	.801	16360	14.5	5	-F	3	C		16		ZX
GRP78646	11	1419+2	1421+1	1444	N30	E50	.795	16357	15.3	25	-N				30	.5	F
RAMY	11	1419	1422	1455	N29	E48	.773	16357	15.2	36	-N	3	C		44		F
HOLL	11	1421	1421	1432	N31	E52	.815	16357	15.5	11	-N	3	C		16		
647 BIGB	11	1515	1517	1530	N31	W57	.854	16364	7.4	15	-N	1	C	1517	30	.6	G ZX
648 RAMY	11	1547	1550	1625	N12	E01	.103	16350	11.7	38	-F	3	C		101		ZX
	11	1641	1859	NO FLARE PATROL													
649 HOLL	11	1836	1839	1918	N11	W04	.109	16350	11.5	42	-N	3	C		106		F ZX
	11	1902	2054	NO FLARE PATROL													
650 HOLL	11	2000	2003	2018	N11	E60	.861	16363	16.3	18	-N	3	C		29		ZX
651 RAMY	11	2043	2045	2057	N29	E46	.755	16357	15.3	14	-N	3	C		34		ZX

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.		
652 RAMY	11	2050	2100	2117	N21	W41	.674	16341	8.8	27	-N	3	C		59			ZX
653 RAMY	11	2058	2058	2118	N29	E45	.745	16357	15.2	20	-N	3	C		377			ZX
654 HOLL	11	2123	2157	2231	N10	E57	.834	16363	16.2	68	-N	3	C		58		F	ZX
655 HOLL	11	2202	2209	2231	N30	E46	.758	16357	15.4	29	-N	3	C		42			ZX
656 HOLL	11	2253	2300	2348	S15	W45	.759	16343	8.6	55	-B	3	C		71		U	ZX
GRP78657	11	2259+0	2328	0030	N14	W06	.170	16350	11.5	91	1N				450	4.6	EJU	
VORO	11	2259E		0038	N14	W05	.161	16350	11.6	91D	2F		P	2328	547	5.6	EJ	
HOLL	11	2259	2328	0009D	N14	W07	.181	16350	11.4	70D	1B	3	C		345		U	
658 VORO	11	2314	2314	2317	N28	E46	.751	16357	15.4	3	-N		C	2314	90	1.3	E	ZX
659 VORO	12	0236	0237	0244D	N15	W10	.229	16350	11.4	8D	-F		C	0237	90	.9	E	ZX
660 PURP	12	0425	0430	0432	N31	E40	.787	16357	15.2	7	?F		P					ZX
	IMP.1 NO 8 YUNN																	
GRP78661	12	0513>9	0523+7	0615	N08	E56	.825	16363	16.4	62	2N				490	8.8	EU	
			0606															
YUNN	12	0513	0523	0620	N06	E53	.795	16363	16.2	67	2B		C		629	10.5		
TACH	12	0518	0527	0600	N10	E54	.804	16363	16.3	42	1N		V	0527	115	2.0	U	
PURP	12	0523	0530	0610	N07	E61	.871	16363	16.8	47	2N		P		491	9.8		
ABST	12	0605E	0606	0633	N09	E58	.844	16363	16.6	28D	1F		P	0606	131	2.4	E	
662 TELV	12	0721E	0721	0802	N11	E00	.085	16350	12.3	41D	-B	3			20	.2		ZX
663 CATA	12	0730	0740	0745D	N15	E65	.901	16363	17.2	15D	-N	2	P	0740	28	.6		ZX
GRP78664	12	0740+7	0744+5	0753	S36	E31	.779	16360	14.6	13	-N				50	.8	DG	
ABST	12	0740	0744	0753	S36	E34	.797	16360	14.9	13	-N		C	0744	96	1.6	D	
HTPR	12	0743		0745D	S34	E29	.750	16360	14.5	2D	-N		C	0744	40	.5		
YUNN	12	0744	0748	0753	S37	E31	.787	16360	14.6	9	-B		C		48	.8	G	
WEND	12	0744		0758	S35	E29	.759	16360	14.5	14	-N		V					
CATA	12	0745E	0745	0745D	S35	E33	.783	16360	14.8		-B	2	P	0745	56	.9		
PURP	12	0747	0749	0750	S38	E33	.806	16360	14.8	3	-N		C					
GRP78665	12	0818+3	0819+6	0833	N13	W01	.121	16350	12.3	15	-F						DHV	
ABST	12	0818	0819	0836	N13	W01	.121	16350	12.3	18	-F		C	0819	79	.8	DV	
TELV	12	0820		0833D	N11	E00	.085	16350	12.3	13D	-N	3						
PURP	12	0821	0825	0828	N13	W02	.125	16350	12.2	7	-F		C				H	
GRP78666	12	0900E		0950D	N16	W36	.597	16344	9.7	50	-F						DHL	
KHAR	12	0900E		0950D	N18	W32	.551	16344	10.0	50D	-F		P	0902	65	.7	DHL	
KHAR	12	0932E		0940D	N14	W40	.644	16344	9.4	8D	-F		V	0932			D	
GRP78667	12	0932	0933	1000	N12	W03	.115	16350	12.2	28	-N						DO	
TELV	12	0932	0933	1000	N11	E00	.085	16350	12.4	28	-N	3			6			
KHAR	12	0946E		0959D	N13	W07	.169	16350	11.9	13D	-F		P	0947			DO	
GRP78668	12	1029	1029	1105	N12	W01	.104	16350	12.4	36	-F						LOW	
			1039															
TELV	12	1029	1029	1105	N12	E02	.108	16350	12.6	36	-F	3			15	.2	H	
KHAR	12	1031E	1039	1055D	N13	W04	.138	16350	12.1	24D	1F		P	1047	220	2.3	LO	
669 KHAR	12	1035E		1046D	N18	W32	.551	16344	10.0	11D	-F		V	1038			D	ZX
GRP78670	12	1035	1036	1136	N28	E29	.576	16357	14.6	61	-B						ELO	
			1105															
TELV	12	1035	1036	1152	N26	E28	.549	16357	14.5	77	-B	*			30	.3		
TELV	12	1035	1036	1149D	N30	E30	.601	16357	14.7	74D	-N	*			71	.8		
KHAR	12	1038E		1147D	N26	E30	.572	16357	14.7	69D	1N	*	P	1047	400	5.1	ELO	
WEND	12	1042E		1109	N28	E30	.586	16357	14.7	27D	1N	*	V	1046	180	2.4		
LVOV	12	1104	1105	1124	N32	E29	.608	16357	14.6	20	-F	*	C	1105	70	.9	E	
671 KHAR	12	1120E	1122	1140D	N11	W06	.134	16350	12.0	20D	-F		P	1126	110	1.1	DL	ZX
GRP78672	12	1205+5	1206+2	1219	N11	W06	.134	16350	12.1	14	-N				90	.9		
TELV	12	1205	1206	1220	N10	W06	.124	16350	12.1	15	-B	3			81	.8		
RAMY	12	1206	1208	1219	N10	W06	.124	16350	12.1	13	-B	3	C		100			
LVOV	12	1207	1208	1217	N12	W07	.158	16350	12.0	10	-F		C	1208	100	1.0	D	
CATA	12	1210E	1210	1210D	N11	W07	.147	16350	12.0		-B	1	P	1210	56	.6		
WEND	12	1210		1219	N11	W04	.110	16350	12.2	9	-F		V					
KHAR	12	1211E		1223D	N11	W06	.134	16350	12.1	12D	-F		P	1213	160	1.7	E	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
673 KHAR	12	1224E		1228D	N29	E42	.716	16357	15.7	4D	-F		P					ZX
674 RAMY	12	1331	1334	1355	N16	W35	.583	16344	9.9	24	-F	3	C		41			ZX
675 RAMY	12	1627	1641	1648	N17	W33	.560	16344	10.2	21	-B	3	C		21			ZX
GRP78676	12	1827+0	1832	1905	S15	W55	.852	16343	8.6	38	-N				60	1.1	E	
HUAN	12	1827		1846D	S16	W55	.855	16343	8.6	19D	-N	1	P	1831	35		E	
BIGB	12	1827	1832	1905	S14	W56	.858	16343	8.6	38	-N	3	C	1832	80	1.5		
GRP78677	12	1936>9	1938 1951	2026	N32	E55	.842	16366	16.9	50	-N						G	
BIGB	12	1936	1938	2026	N31	E51	.807	16366	16.6	50	-N	3	C	1938	110	1.8	G	
PALE	12	1951	1951	2003D	N34	E59	.875	16366	17.3	12D	-F	3	C		36		DE	
GRP78678	12	2035+2	2055 2102	2210	N27	E33	.611	16357	15.3	95	-N						F	
PALE	12	2035	2055U	2057D	N27	E32	.601	16357	15.3	22D	-F	2	C		91		F	
BIGB	12	2037	2102	2210	N27	E34	.622	16357	15.4	93	-B	3	C	2102	130	1.6		
679 BIGB	12	2126	2143	2231	N08	E60	.862	16367	17.4	65	-N	3	C	2143	90	1.8		ZX
GRP78680	12	2300	2328	0027	N15	W35	.580	16344	10.3	87	-N				80	1.0	DJK	
BIGB	12	2300	2328	2359D	N15	W35	.176	16344	10.3	59D	-N	3	P	2328	110	1.1		
MANI	12	2330E	2338U	0020D	N15	W31	.526	16344	10.7	50D	-F	2	C		60			
VORO	12	2340E		0027	N15	W35	.580	16344	10.4	47D	-N		P	2347	90	1.0	DJK	
681 VORO	13	0148	0148	0152	S17	W60	.896	16343	8.6	4	-N		C	0148	90	1.8	DJ	ZX
682 YUNN	13	0416E	0416	0430	N14	W25	.436	16350	11.3	14D	-N		C		129	1.4		ZX
683 YUNN	13	0657	0700	0714	N17	W38	.626	16344	10.4	17	?N		C		209	2.7		ZX
	IMP.1 NO I PURP			CULG														
684 KHAR	13	0815E		0900D	N29	E58	.859	16366	17.7	45D	-F		P	0828			DH	ZX
GRP78685	13	0840	0843	0900D	N16	W39	.636	16344	10.4	20	-N							
MONT	13	0840	0843	0850D	N16	W39	.636	16344	10.4	10D	-N		C	0843	70			
KHAR	13	0845E		0854D	N16	W40	.648	16344	10.4	9D	-F		V	0848			T	
ATHN	13	0855E	0855	0900D	N17	W37	.613	16344	10.6	5D	-N	*		0855	125	1.3		
GRP78686	13	0855+1	0857	0900	N11	W15	.270	16350	12.2	5	-F						DH	
KHAR	13	0855E		0900D	N12	W16	.290	16350	12.2	5D	-F		V	0858			DH	
ISTA	13	0856	0857	0900	N11	W15	.270	16350	12.2	4	-N						D	
GRP78687	13	0915	0918	0935D	N15	W39	.634	16344	10.5	20	-N						H	
KHAR	13	0915	0918	0935D	N16	W40	.648	16344	10.4	20D	-N		P	0918	110	1.5	HT	
KHAR	13	0931E		0931D	N15	W38	.521	16344	10.5		-F		P				DT	
688 KHAR	13	0954E		1008D	N14	W40	.645	16344	10.4	14D	-F		P				DT	ZX
	13	1050	1052	NO FLARE PATROL														
689 RAMY	13	1122	1123	1141	N15	W41	.659	16344	10.4	19	-F	3	C		23			ZX
690 RAMY	13	1150	1207	1351	N15	W42	.671	16344	10.3	121	-N	3	C		67			ZX
691 RAMY	13	1200	1200	1227	S22	W88	1.000		6.9	27	-F	3	C					ZX
692 RAMY	13	1238	1318	1321D	S17	W69	.951	16343	8.4	43D	-B	3	C				FDE	ZX
693 RAMY	13	1247	1248	1300	S32	E13	.643	16360	14.5	13	-N	3	C		21			ZX
694 RAMY	13	1317	1317	1353	N31	E46	.763	16366	17.0	36	-F	3	C		30			ZX
695 RAMY	13	1332	1339	1422	N28	E22	.504	16357	15.2	50	-B	3	C		86		FDE	ZX
GRP78696	13	1352	1442 1500+2	1611	N14	W48	.741	16344	10.0	139	-N							
RAMY	13	1352	1442	1711	N14	W41	.657	16344	10.5	199	-B	3	C		85			
HOLL	13	1411E	1500	1623	N13	W48	.741	16344	10.0	132D	-N	2	C		151		F	
HUAN	13	1450		1535	N15	W49	.754	16344	9.9	45	-F	1	C	1456	20	.3	D	
BIGB	13	1452	1502	1558	N16	W50	.766	16344	9.9	66	-B	2	C	1502	50	.8		
GRP78697	13	1443+8	1444 1453	1502	S16	W70	.955	16343	8.4	19	-F							
RAMY	13	1443	1444	1504	S15	W72	.963	16343	8.2	21	-F	3	C					
HOLL	13	1451	1453	1500	S17	W69	.951	16343	8.4	9	-F	2	C		19			

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONG	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
698 HOLL	13	1631	1643	1649	N12	W41	.655	16344	10.6	18	-N	3	C		32		F	ZX
GRP78699	13	1634+1	1635+1	1647	N29	E28	.574	16357	15.8	13	-N				40	.5		
BIGB	13	1634	1635	1647	N27	E30	.579	16357	15.9	13	-N	2	C	1635	30	.4		
HOLL	13	1635	1636	1643	N29	E28	.574	16357	15.8	8	-B	3	C		37			
RAMY	13	1635	1636	1650	N29	E21	.505	16357	15.3	15	-N	3	C		39			
GRP78700	13	1704+6	1714+2	1724D	S16	W69	.950	16343	8.5	20	-N							
HOLL	13	1704	1714	1828	S17	W69	.951	16343	8.5	84	-N	3	C					
BIGB	13	1710	1716	1724	S15	W70	.954	16343	8.5	14	-N	2	C	1716	60			
GRP78701	13	1705+1	1707	1711	N15	W41	.659	16344	10.6	6	-F							
HUAN	13	1705		1709	N14	W41	.657	16344	10.6	4	-F	*	C					
BIGB	13	1706	1707	1712	N16	W42	.673	16344	10.6	6	-F	*	C	1707	30	.4		
GRP78702	13	1713+4	1729+1	1732	N14	W43	.682	16344	10.5	19	-F				30	.4		
HOLL	13	1713	1730	1735	N14	W40	.645	16344	10.7	22	-N	3	C		36			
HUAN	13	1717		1723	N13	W43	.681	16344	10.5	6	-F	1	C					
PALE	13	1729E	1729U	1732	N14	W49	.753	16344	10.1	30	-F	3	C		21		DE	
703 HOLL	13	1736	1736	1750	N12	W42	.667	16344	10.6	14	-N	3	C		23		F	ZX
704 RAMY	13	1752	1752	1809	N13	W44	.693	16344	10.4	17	-N	3	C		24			ZX
GRP78705	13	1820+3	1824 1835+0	1837	N13	W49	.752	16344	10.1	17	-N				110	1.7	F	
PALE	13	1820	1835	1837	N14	W49	.753	16344	10.1	17	-N	3	C		108		F	
RAMY	13	1821	1835	1853	N13	W44	.693	16344	10.5	32	-N	3	C		122			
HOLL	13	1823	1824	1829	N12	W49	.751	16344	10.1	6	-N	3	C		21			
706 RAMY	13	1938	1939	1942	S17	W71	.960	16343	8.5	4	-F	3	C		16			ZX
GRP78707	13	1958+4	1958+6	2038	S14	W75	.975	16343	8.2	40	-F						F	
PALE	13	1958E	1958U	2003D	S15	W76	.979	16343	8.1	5D	-F	3	C				F	
BIGB	13	2002	2004	2038	S14	W75	.975	16343	8.2	36	-N	1	C	2004	80			
GRP78708	13	2000+5	2003+5	2016	N28	E27	.555	16357	15.9	16	-B				60	.7		
HOLL	13	2000	2004	2015	N29	E27	.564	16357	15.9	15	-B	*	C		77			
BIGB	13	2001E	2003U	2016	N28	E28	.566	16357	15.9	15D	-N	1	P	2003	60	.7		
RAMY	13	2005	2008	2020	N28	E25	.535	16357	15.7	15	-B	*	C		29			
709 PALE	13	2026E	2026U	2027	N14	W50	.764	16344	10.1	1D	-F	3	C		26		F	ZX
710 CULG	13	2038	2041	2058	N15	W23	.412	16350	12.1	20	-N		C	2041	130	1.4		ZX
	13	2130	2138	NO FLARE PATROL														
	13	2143	2148	NO FLARE PATROL														
	13	2159	2204	NO FLARE PATROL														
	13	2213	2219	NO FLARE PATROL														
711 BIGB	13	2227	2233	2300	S13	W75	.974	16343	8.3	33	-N	1	C	2233	90			ZX
712 CULG	14	0010	0023	0123	N26	E89	.998	16373	20.7	73	-F		C	0023	40		KT	ZX
GRP78713	14	0055>9	0128 0147	0316D	N16	W48	.744	16344	10.4	141	1B						FHUZ	
CULG	14	0055U	0147U	0413	N16	W54	.807	16344	10.0	198D	2B		C	0147	700	11.8	UZH	
MANI	14	0120	0128	0151D	N13	W48	.741	16344	10.5	31D	-N	3	C		150		F	
YUNN	14	0224	0228	0232	N17	W48	.745	16344	10.5	8	2B		C		566	8.3		
YUNN	14	0310	0314	0316	N16	W48	.744	16344	10.5	6	-N		C		32	.5		
714 CULG	14	0104	0113	0136	S33	E07	.636	16360	14.6	32	-N		C	0113	100	1.3		ZX
715 CULG	14	0110	0134	0143	S16	W77	.982	16343	8.3	33	?N		C	0134	140		K	ZX
	IMP.1 NO : MITK																	
716 CULG	14	0151	0205U	0231U	N26	E88	.997	16373	20.7	48D	?F		C	0205	70		T	ZX
	IMP.1 NO : MITK																	
717 CULG	14	0406U	0432	0503U	N26	E87	.996	16373	20.7	57D	?N		C	0432	100		T	ZX
	IMP.1 NO : YUNN																	
718 YUNN	14	0424	0425	0430	N14	W48	.742	16344	10.6	6	-F		C		64	1.0		ZX
719 YUNN	14	0424	0425	0430	N30	E43	.731	16366	17.4	6	?N		C		177	2.6		ZX
	IMP.1 NO : CULG																	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.	
720 YUNN	14	0515	0520	0530	N30	E40	.702	16366	17.2	15	-F		C		48	.7	ZX
GRP78721	14	0557	0617	0747	N25	E85	.992	16373	20.6	110	-N						F
PURP	14	0557	0617	0734	N24	E85	.993	16373	20.6	97	-N		C				
ISTA	14	0630E		0800	N26	E86	.994	16373	20.7	90D	1N						BF
GRP78722	14	0650+6	0653+6	0704	N28	E20	.486	16357	15.8	14	-B						EUV
YUNN	14	0650	0654	0702	N28	E21	.496	16357	15.9	12	-N		C		161	1.8	E
ISTA	14	0651	0653	0704	N28	E20	.486	16357	15.8	13	-B						UV
ATHN	14	0656	0659	0712	N27	E19	.465	16357	15.7	16	-B	3	C		32		DE
GRP78723	14	0654+4	0659+1	0715	N14	W50	.764	16344	10.5	21	1B						UV
YUNN	14	0654	0700	0712	N16	W50	.766	16344	10.5	18	2N		C		440	6.7	
ISTA	14	0656	0659	0715	N14	W49	.753	16344	10.6	19	1B						UV
ATHN	14	0658	0700	0719	N13	W51	.774	16344	10.5	21	-B	1		0700	114	1.7	
724 YUNN	14	0810	0814	0816	N17	W50	.767	16344	10.6	6	1B		C		161	2.5	ZX
725 YUNN	14	0820E	0820	0826	N29	E37	.667	16366	17.1	60	1B		C		161	2.2	E ZX
726 YUNN	14	0836	0842	0858	N23	E75	.961	16373	20.0	22	-F		C		32		A ZX
727 TELV	14	0943	0945	0945D	N28	E21	.496	16357	16.0	20	-N	3			24	.3	M ZX
GRP78728	14	1041	1043+1	1117	N27	E11	.399	16357	15.3	36	-B						
TELV	14	1041	1043	1113	N29	E15	.455	16357	15.6	32	-B	3			71	.7	
TELV	14	1043	1044	1117	N25	E08	.351	16357	15.0	34	-F	3			24	.3	
GRP78729	14	1115	1216+2 1304	1318	N31	E40	.708	16366	17.5	123	-N				100	1.5	DV
RAMY	14	1115	1218	1324	N30	E33	.633	16366	16.9	129	-B	3	C		68		
ABST	14	1215E	1216	1225D	N31	E40	.708	16366	17.5	100	-N		P	1216	131	1.8	DV
HUAN	14	1254	1304	1312	N32	E42	.732	16366	17.7	18	-N	1	C	1304	35	.5	
730 TELV	14	1119	1121	1128	N29	E20	.497	16357	16.0	9	-N	3			40	.4	ZX
731 RAMY	14	1146	1150	1220	N26	E72	.947	16373	19.9	34	?F	3	C		111		ZX
	IMP.1 NO # ABST CATA																
GRP78732	14	1150+5	1153+3	1201	S16	W84	.997	16343	8.2	11	-N						DJ
RAMY	14	1150	1153	1204	S17	W80	.991	16343	8.5	14	-F	3	C		23		
ABST	14	1155	1156	1158	S15	W89	1.000	16343	7.8	3	1N		C	1156	87		DJ
733 ABST	14	1155	1156	1202	N25	E89	.998	16373	21.2	7	?N	*	C	1156	87		DJV ZX
	IMP.1 NO # RAMY																
GRP78734	14	1201+2	1203+1	1231	N14	W55	.816	16344	10.4	30	-B						DV
RAMY	14	1201	1203	1231	N13	W55	.815	16344	10.4	30	-B	3	C		50		
ABST	14	1203	1204	1225D	N15	W55	.816	16344	10.4	22D	1N		P	1204	131	2.3	DV
735 RAMY	14	1211	1213	1228	S17	W80	.991	16343	8.5	17	-F	3	C		11		ZX
736 RAMY	14	1246	1250	1328	N13	W61	.870	16344	10.0	42	-N	3	C		16		ZX
GRP78737	14	1314+0	1315+3	1327	N25	E75	.961	16373	20.2	13	-B				50		Y
ATHN	14	1314	1318	1327	N24	E75	.961	16373	20.2	13	-B	3	C		64		F
RAMY	14	1314	1315	1328	N26	E71	.942	16373	19.9	14	-B	3	C		42		Y
HUAN	14	1314	1316	1324	N25	E87	.996	16373	21.1	10	-N	1	C	1316	45		E
738 RAMY	14	1412	1414	1420	N12	W56	.825	16344	10.4	8	-N	3	C		28		ZX
739 RAMY	14	1414	1418	1430	S06	W81	.990	16361	8.5	16	1N	3	C		94		ZX
740 RAMY	14	1416	1418	1430	S17	W81	.993	16343	8.5	14	-F	3	C		50		ZX
GRP78741	14	1534+2	1554+1	1604	N32	E35	.666	16366	17.3	30	-N				60	.8	
HUAN	14	1534		1538D	N33	E31	.636	16366	17.0	4D	-F	1	P				D
HOLL	14	1536	1554U	16110	N33	E38	.700	16366	17.5	350	-N	2	C		144		F
RAMY	14	1553	1555	1601	N31	E32	.630	16366	17.1	8	-N	3	C		55		
BIGB	14	1553	1554	1604	N31	E40	.708	16366	17.7	11	-N	2	C	1554	40	.5	
GRP78742	14	1537+0	1537+4	1545	N25	E80	.980	16373	20.7	8	-F				60		AY
BIGB	14	1510	1537	1604	N25	E85	.992	16373	21.0	54	-N	1	C	1537	90		A
HUAN	14	1537		1538D	N25	E87	.996	16373	21.2	1D	-F	1	P				
RAMY	14	1537	1541	1545	N26	E74	.956	16373	20.2	8	-F	*	C				Y
HOLL	14	1537	1538	1544	N27	E76	.965	16373	20.4	7	-F	*	C		38		

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78743	14	1626+2	1627+1	1639	N31	E36	.669	16366	17.4	13	-F				25	.3	F	
BIGB	14	1626	1627	1629	N31	E40	.708	16366	17.7	3	-F	2	C	1627	20	.3		
RAMY	14	1628	1628	1648	N31	E33	.640	16366	17.2	20	-N	3	C		28		F	
744 BIGB	14	1710	1711	1717	N24	E85	.993	16373	21.1	7	-B	2	C	1711	30			ZX
GRP78745	14	1720+0	1720+6	1735	N31	E36	.669	16366	17.4	15	-N				90	1.2		
PALE	14	1720E	1720	1735	N31	E35	.659	16366	17.3	15D	-N	3	C		101		FDE	
BIGB	14	1720	1721	1731	N31	E39	.698	16366	17.6	11	-N	2	C	1721	30	.4		
RAMY	14	1720	1721	1735	N32	E36	.675	16366	17.4	15	-B	3	C		95		FDE	
HOLL	14	1722E	1726U	1731D	N32	E36	.675	16366	17.4	9D	-B	2	C		93		DE	
GRP78746	14	1758+0	1801+1	1822	N26	E79	.976	16373	20.7	24	-N							
PALE	14	1758	1801	1830	N26	E79	.976	16373	20.7	32	-N	3	C				FDE	
BIGB	14	1758	1801	1807	N25	E85	.992	16373	21.1	9	-N	2	C	1801	70			
HOLL	14	1758	1802	1822	N28	E75	.961	16373	20.4	24	-B	3	C					
747 HOLL	14	1801	1803	1817	N28	E09	.401	16357	15.4	16	-N	3	C		64		U	ZX
748 HOLL	14	1825	1829	1833	N30	E76	.966	16373	20.5	8	-F	3	C					ZX
749 BIGB	14	1848	1853	1909	N23	W55	.825	16344	10.7	21	-N	2	C	1853	60	1.1		ZX
GRP78750	14	1919+1	1922+2	1939	N26	E80	.980	16373	20.8	20	-N							
PALE	14	1919	1924	1933	N26	E80	.980	16373	20.8	14	-F	3	C				DE	
BIGB	14	1919	1924	1945	N25	E80	.980	16373	20.8	26	-N	2	C	1924	60			
HOLL	14	1920	1922	1939	N28	E76	.965	16373	20.5	19	-N	3	C					
GRP78751	14	1945+0	1945+1	1954	N15	W62	.878	16344	10.2	9	-N				30	.6		
BIGB	14	1945	1946	1953	N16	W64	.894	16344	10.0	8	-N	2	C	1946	30	.7		
HOLL	14	1945	1945	1954	N15	W61	.870	16344	10.2	9	-N	3	C		33			
752 HOLL	14	1948	1950	2001	N29	E76	.965	16373	20.5	13	-N	3	C					ZX
753 BIGB	14	2014	2018	2032	N25	E80	.980	16373	20.8	18	-N	2	C	2018	20			ZX
754 BIGB	14	2124	2125	2130	N25	E80	.980	16373	20.9	6	-F	2	C	2125	20			ZX
GRP78755	14	2140	2146+1	21520	N25	E79	.976	16373	20.8	12	-F							
BIGB	14	2140	2146	2227	N25	E80	.980	16373	20.9	47	-N	2	C	2146	30			
PALE	14	2146E	2147U	2152	N26	E78	.973	16373	20.8	6D	-F	3	C				DE	
756 BIGB	14	2259	2300	2307	N25	E80	.980	16373	21.0	8	-N	2	C	2300	30			ZX
757 BIGB	14	2309	2345	0011	N24	E80	.980	16373	21.0	62	-B	2	C	2345	30			ZX
GRP78758	14	2319+4	2324+4	2335	N30	E13	.454	16357	15.9	16	-N				70	.8	HL	
CULG	14	2319	2324U	2358	N30	E14	.460	16357	16.0	39	1N		C	2324	400	4.4	L	
HOLL	14	2323	2328	2335	N32	E12	.475	16357	15.9	12	-B	3	C		69		DE H	
BIGB	14	2323	2327	2333	N30	E15	.468	16357	16.1	10	-N	2	C	2327	30	.3		
MANI	14	2323E	2325U	2336	N28	E12	.420	16357	15.9	13D	-F	2	C		50			
PALE	14	2324E	2328U	2334D	N30	E14	.460	16357	16.0	10D	-N	3	C		80			
759 CULG	14	2324	2337	2342	S15	W90	1.000	16343	8.2	18	-F		C	2337	40			ZX
GRP78760	15	0008+6	0015+3	0024	N28	E07	.392	16357	15.5	16	1N							
CULG	15	0008	0018	0051	N29	E08	.412	16357	15.6	43	2N		C	0018	600	6.6		
YUNN	15	0014	0015	0020	N28	E07	.392	16357	15.5	6	1B		C		225	2.5		
BIGB	15	0014	0016	0024	N28	E07	.567	16357	15.5	10	-F	2	C	0016	90	.9		
761 BIGB	15	0012	0017	0034D	N25	E78	.973	16373	20.9	22D	-N	2	P	0017	40			ZX
GRP78762	15	0624E	0625	0647	N28	E05	.385	16357	15.6	23	-F						D	
MANI	15	0624E	0625	0638D	N29	E08	.412	16357	15.9	14D	-F	3	C		25			
ISTA	15	0625E		0647	N28	E03	.379	16357	15.5	22D	-N						D	
763 ISTA	15	0625E		0738	S15	W90	1.000	16343	8.5	73D	?N	*					A	ZX
	IMP.1 NO 8 YUNN			TACH														
764 ISTA	15	0639		0645	N26	E65	.906	16373	20.2	6	-F						D	ZX
GRP78765	15	0734		0740	N27	00	.360	16357	15.3	6	-F						E	
ISTA	15	0734		0740	N27	E01	.361	16357	15.4	6	-F	*					E	
CATA	15	0735E	0735	0735D	N27	W01	.361	16357	15.2		-N	*	P	0735	140	1.5		
766 CATA	15	0930E	0930	1005D	S16	W90	1.000	16343	8.6	35D	-F	2	P	0930	28			ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS AREA Mill. of Disk	CORR AREA Sq. Deg.		
767 KHAR	15	1855E		1133D	N17	W75	.961	16344	9.8	380	-F		P	1103			D	ZX
768 KHAR	15	1137E	1138	1144D	N17	W67	.916	16344	10.5	70	-N		V	1138				ZX
769 RAMY	15	1219	1227	1302	N31	E24	.555	16366	17.3	43	-N	3	C		45			ZX
770 LVOV	15	1332	1332	1441	N25	W85	.993	16341	9.2	69	-F		C	1332	50		DKC	ZX
771 RAMY	15	1343	1347	1402	N32	E22	.548	16366	17.2	19	-F	3	C		36			ZX
772 RAMY	15	1409	1429	1544	N28	E64	.901	16373	20.4	95	-N	3	C		35			ZX
GRP78773	15	1451+1	1452+6	1505	N31	E03	.427	16357	15.8	14	-B				50	.6		
BIGB	15	1451	1458	1502	N31	E05	.431	16357	16.0	11	-N	2	C	1458	50	.5		
HOLL	15	1452	1453	1505	N31	E03	.427	16357	15.8	13	-B	3	C		55			
RAMY	15	1452	1452	1505	N31	E03	.427	16357	15.8	13	-B	3	C		29			
774 BIGB	15	1551	1552	1557	N26	W85	.992	16341	9.3	6	-N	2	C	1552	20			ZX
GRP78775	15	1556>9	1611+5	1704	N27	E65	.907	16373	20.5	68	-N				30			
RAMY	15	1556	1611	1620D	N28	E63	.895	16373	20.4	240	-N	3	C		21			
BIGB	15	1613	1616	1704	N26	E67	.919	16373	20.7	51	-N	2	C	1616	40			
776 BIGB	15	1751	1754	1817	N27	W85	.992	16341	9.4	26	-B	3	C	1754	40		A	ZX
GRP78777	15	1847	1906+2	1927	N32	E21	.540	16366	17.4	40	-N				80	1.0		
HOLL	15	1847	1908	1920	N33	E18	.528	16366	17.1	33	-B	3	C		93		DE	
PALE	15	1900E	1907	1942D	N32	E21	.540	16366	17.4	420	-N	3	C		90		F	
BIGB	15	1905	1906	1927	N31	E21	.529	16366	17.4	22	-N	3	C	1906	50	.5		
778 BIGB	15	1920	1925	1934	N27	W85	.992	16341	9.4	14	-B	3	C	1925	30		A	ZX
779 BIGB	15	2007	2009	2023	N26	E65	.906	16373	20.7	16	-N	3	C	2009	40			ZX
GRP78780	15	2027+0	2033+1	2107	N27	E63	.894	16373	20.6	40	-F				40	1.0	F	
BIGB	15	2027	2034	2107	N26	E65	.906	16373	20.7	40	-N	3	C	2034	40			
PALE	15	2027E	2033U	2051D	N28	E62	.888	16373	20.5	240	-F	3	C		40		F	
781 CULG	15	2050	2057	2119	N08	E03	.064	16363	16.1	29	-F		C	2057	40	.4		ZX
GRP78782	15	2052	2057	2119	N28	W04	.382	16357	15.6	27	-N							
CULG	15	2052	2057	2119	N29	W03	.395	16357	15.6	27	-N		C	2057	110	1.2		
PALE	15	2058E	2058U	2109D	N27	W05	.369	16357	15.5	110	-F	3	C		26		DE	
GRP78783	15	2058>9	2119+3	2145	N31	E20	.520	16366	17.4	47	-F						F	
PALE	15	2058E	2122	2152D	N32	E19	.524	16366	17.3	540	-F	*	C		41		F	
CULG	15	2114	2119	2137	N31	E21	.529	16366	17.5	23	-F	*	C	2119	140	1.6	T	
GRP78784	15	2106+0	2109+2	2118	N27	W89	.998	16341	9.2	12	-F				25			
CULG	15	2106	2111	2117	N27	W88	.997	16341	9.3	11	-F		C	2111	30			
BIGB	15	2106	2109	2119	N27	W90	.999	16341	9.1	13	-N	3	C	2109	20			
785 CULG	15	2129	2130	2136	N31	W04	.429	16357	15.6	7	-N		C	2130	70	.8		ZX
GRP78786	15	2145+9	2159+2	2215	N26	E64	.900	16373	20.7	30	-F				35		F	
PALE	15	2145	2159	2200D	N26	E63	.893	16373	20.6	150	-F	3	C		31		F	
BIGB	15	2154	2201	2215	N26	E65	.906	16373	20.8	21	-N	3	C	2201	40			
787 CULG	15	2222	2244	2304	N23	E23	.469		17.7	42	-N		C	2244	60	.7	FT	ZX
788 CULG	15	2232	2241	2252	N15	W49	.754	16350	12.3	20	-F		C	2241	40	.6		ZX
789 PALE	15	2236E	2243U	2244	N26	E62	.885	16373	20.6	80	-F	3	C		13			ZX
790 PALE	15	2258	2300U	2312	N27	E63	.894	16373	20.7	14	-N	3	C		20		F	ZX
791 CULG	15	2356	2357	0005	N19	E44	.704	16368	19.3	9	-F		C	2357	60	.8		ZX
GRP78792	16	0020+9	0027+3	0045	N23	W67	.918	16344	11.0	25	1N						FS	
CULG	16	0000	0030	0109	N23	W67	.918	16344	11.0	69	1N		C	0030	210	4.9	S	
BIGB	16	0028	0027	0044D	N23	W67	.918	16344	11.0	240	-N	1	P	0027	70			
YUNN	16	0020	0030	0040	N25	W66	.912	16344	11.1	20	1B		C		161	3.7		
PALE	16	0025	0027	0045	N21	W66	.910	16344	11.1	20	-F	3	C		36		F	
PURP	16	0029	0030	0046	N22	W70	.935	16344	10.8	17	1N		C					
793 PALE	16	0044	0044	0107	N26	E61	.878	16373	20.6	23	-F	3	C		17		F	ZX

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq Deg.		
794 CULG	16	0150	0154	0211	S26	E58	.903	0	20.4	21	-N		C	0154	50	1.0	G	ZX
795 CULG	16	0236	0243	0305	N06	E52	.785	16368	20.0	29	?N		C	0243	180	2.9	L	ZX
	IMP.1 NO : YUNN			PURP	MITK													
GRP78796	16	0237	0252 0345	0358	N14	W78	.974	16344	10.3	81	?F							
CULG	16	0237	0252	0340	N16	W80	.981	16344	10.1	63	?F		C	0252	80			
	IMP.1 NO : YUNN			PURP	MITK													
CULG	16	0331	0345	0358	N13	W76	.966	16344	10.4	27	-N	*	C	0345	60			
797 CULG	16	0257	0303	0311	N30	E00	.410	16357	16.1	14	-N		C	0303	40	.4		ZX
798 CULG	16	0437	0441	0445	S26	E56	.890		20.4	8	-N		C	0441	60	1.2	G	ZX
799 PURP	16	0443	0444	0450	N36	W20	.578		14.7	7	-N		P				G	ZX
GRP78800	16	0532E	0533	0540D	N26	E58	.855	16373	20.6	8	-N						EJ	
ABST	16	0532E	0533	0540D	N28	E60	.874	16373	20.7	8D	-N		P	0533	87	1.7	DJ	
ABST	16	0532E	0533	0540	N24	E56	.836	16373	20.4	8D	-N		P	0533	87	1.6	EJ	
801 ABST	16	0537E	0539	0545D	S06	E36	.613	16368	18.9	8D	-N		P	0539	131	1.7	E	ZX
GRP78802	16	0625+6	0632+0	0650	N30	W02	.411	16357	16.1	25	-B				160	1.8	DH	
CULG	16	0625	0632	0654	N30	W02	.411	16357	16.1	29	-B		C	0632	140	1.5	H	
TACH	16	0631	0632	0645	N31	W02	.427	16357	16.1	14	1N		C	0632	177	2.0	D	
803 TACH	16	0657	0659	0710	N31	E11	.457	16366	17.1	13	-N		C	0659	127	1.4	D	ZX
804 CATA	16	0745	0745	0800	N30	W07	.424	16357	15.8	15	-N	2	C	0745	112	1.2		ZX
805 ISTA	16	0800		0825	N28	W09	.403	16357	15.7	25	-F						D	ZX
GRP78806	16	0855	0857	0910	N28	W10	.409	16357	15.6	15	-F						L	
MONT	16	0855	0857	0904	N29	W09	.418	16357	15.7	9	-F		C	0857	50			
KHAR	16	0900E		0915D	N27	W12	.408	16357	15.5	15D	-F		V	0904			L	
807 KHAR	16	0946E	0948	1020D	N26	E54	.822	16373	20.5	34D	-N		P	0950	110	2.0	EH	ZX
808 KHAR	16	1020E	1034	1056D	N27	W12	.408	16357	15.5	36D	?F		P	1033	200	2.3	KL	ZX
	IMP.1 NO : MONT			CATA														
809 KHAR	16	1027E	1030	1033D	N13	W69	.929	16350	11.3	6D	-F		P	1030	30		D	ZX
810 KHAR	16	1110	1113	1135	N23	E53	.807	16373	20.4	25	-N		P	1111			EH	ZX
GRP78811	16	1202+3	1205+5	1245	N25	W15	.406	16357	15.4	43	1B				270	3.0	HV	
MONT	16	1202	1206	1230D	N27	W14	.423	16357	15.5	28D	1B		C	1206	250			
TELV	16	1203	1205	1236	N22	W20	.426	16357	15.0	33	1B	1	C		285	3.1	FV	
RAMY	16	1204	1207	1313	N26	W13	.402	16357	15.5	69	1B	3	C		205		FDE	
CATA	16	1205	1210	1245D	N25	W15	.406	16357	15.4	40D	1B	2	P	1210	449	5.0		
KHAR	16	1207E	1209	1233D	N25	W16	.416	16357	15.3	26D	1N		P	1209	280	3.2	EH	
812 LVOV	16	1318	1319	1328	N26	E57	.847	16373	20.8	10	-N		C	1319	50	.9	D	ZX
813 LVOV	16	1348	1350	1355	N28	W12	.422	16357	15.7	7	-N		C	1350	50	.6	D	ZX
GRP78814	16	1419+0	1424+1	1438	N28	E52	.809	16373	20.5	19	-N				40	.7	F	
HOLL	16	1419	1425	1438	N28	E53	.817	16373	20.6	19	-N	3	C		53			
RAMY	16	1419	1424	1437	N28	E51	.800	16373	20.4	18	-N	3	C		30		F	
GRP78815	16	1448+4	1455+3	1553	N17	E02	.197	16363	16.8	65	-N				110	1.1	U	
HOLL	16	1448	1455	1601	N16	E02	.180	16363	16.8	73	-B	3	C		112		UDE	
BIGB	16	1451	1458	1544	N17	E02	.197	16363	16.8	53	-N	2	C	1458	110	1.1		
RAMY	16	1452	1458	1553	N17	E02	.197	16363	16.8	61	1N	3	C		265		U F	
GRP78816	16	1638+0	1638 1645	1652D	N27	W13	.415	16357	15.7	14	-F						F	
HOLL	16	1638	1645	1733	N28	W14	.436	16357	15.6	55	-F	3	C		85			
RAMY	16	1638	1638	1652	N27	W13	.415	16357	15.7	14	-N	3	C		55		F	
GRP78817	16	1642+1	1646+4	1703	N27	E54	.824	16373	20.7	21	-F				35	.6		
BIGB	16	1642	1646	1659	N26	E56	.839	16373	20.9	17	-F	2	C	1646	40	.7		
HOLL	16	1643	1650	1706	N29	E52	.811	16373	20.6	23	-N	3	C		33			
818 HOLL	16	1645	1648	1658	N15	W03	.168	16363	16.5	13	-F	3	C		28			ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78819	16	1727	1732 1803	1911	N28	E49	.782	16373	20.4	104	-B						F	
HOLL	16	1727	1732	1920	N29	E49	.785	16373	20.4	113	-B	3	C		40		F	
HOLL	16	1727	1803	1920	N29	E49	.785	16373	20.4	113	-B	3	C		106		F	
PALE	16	1821E	1830	1902	N28	E50	.791	16373	20.5	41D	-N	3	C		30		F	
820 BIGB	16	2002E	2011	2022	N25	E56	.837	16373	21.8	20D	-N	1	P	2011	30	.6		ZX
821 BIGB	16	2009	2016	2033D	S18	W70	.956	16372	11.6	24D	-N	1	P	2016	40			ZX
822 PALE	16	2009E	2024U	2032	S11	E81	.991	16379	22.9	23D	-F	3	C		15			ZX
823 PALE	16	2017	2022	2047	S06	E26	.477	16368	18.8	30	-F	3	C		32			ZX
824 CULG	16	2037E	2037E	2041	N30	E02	.411	16366	17.0	4D	-N		P	2037	60	.7		ZX
825 PALE	16	2058	2100	2211	S20	W70	.958	16372	11.6	73	-F	3	C		12			ZX
826 CULG	16	2104	2112	2122	N18	E20	.391	16368	18.4	18	-N		C	2112	50	.5	G	ZX
827 CULG	16	2119	2120	2126	N29	W15	.457	16357	15.8	7	-N		C	2120	100	1.1		ZX
828 CULG	16	2119	2127	2155	N07	E42	.666	16368	20.0	36	-F		C	2127	80	1.0		ZX
829 CULG	16	2145	2159	2209	S05	E27	.486	16368	18.9	24	-F		C	2159	140	1.6		ZX
830 CULG	16	2225E	2225	2232D	N18	W89	.999	16344	10.3	7D	-N		P	2225	20			ZX
GRP78831	16	2236+3	2239+2	2322	S06	E38	.533	16368	19.2	46	-N						FL	
CULG	16	2236	2241	2326	S08	E30	.544	16368	19.2	50	1N		C	2241	280	3.3	L	
HOLL	16	2239	2239	2317	S05	E30	.528	16368	19.2	38	-N	3	C		55		F	
GRP78832	16	2303>9	2308 2322	2333	N32	E02	.442	16366	17.1	30	-N						FL	
CULG	16	2303	2308	2341	N33	E00	.457	16366	17.0	38	1N		C	2308	350	4.0	L	
PALE	16	2319	2322	2324	N31	E05	.432	16366	17.3	5	-F	3	C		51		F	
GRP78833	16	2303>9	2312 2329	2340	S20	W77	.984	16372	11.2	37	-F							
CULG	16	2303	2312U	2329U	S19	W80	.991	16372	11.0	26D	1F		C	2312	120		T	
PALE	16	2321	2329	2340	S21	W74	.976	16372	11.4	19	-F	3	C		18			
834 PALE	16	2319	2321	2325	N27	E48	.769	16373	20.6	6	-F	3	C		76			ZX
835 CULG	16	2333	2339	2352	N15	E01	.161	16363	17.1	19	-F		C	2339	100	1.0	L	ZX
836 PALE	17	0038	0046	0128	N26	E43	.698	16373	20.3	50	?N	3	C		239		ZDE	ZX
	IMP.1 NO : CULG PURP																	
837 PALE	17	0218	0219	0221	N07	E36	.583	16368	19.8	3	-F	3	C		24			ZX
838 CULG	17	0312	0318	0339	N23	W88	.996	16344	10.5	27	-F		C	0318	40			ZX
839 YUNN	17	0320	0326	0330	N30	E03	.366	16366	17.4	10	-N		C		64	.7		ZX
840 CULG	17	0325	0331	0346	S27	E53	.887	16374	21.1	21	-F		C	0331	40	.8		ZX
841 CULG	17	0335	0348U	0411	N32	W02	.396	16366	17.0	36	?N		C	0348	200	2.2	H	ZX
	IMP.1 NO : PURP YUNN																	
842 YUNN	17	0355	0400	0405	S12	E77	.983	16379	22.9	10	-N		C		64		A	ZX
843 YUNN	17	0440	0444	0444D	N31	E04	.384	16366	17.5	4D	-N		C		48	.5		ZX
GRP78844	17	0545+0	0548+1	0553	N06	E34	.557	16368	19.8	8	-N				110	1.3	OG	
TACH	17	0545	0548	0550	N06	E35	.571	16368	19.9	5	-N		C	0548	132	1.6	D	
YUNN	17	0545	0549	0555	N06	E34	.601	16368	19.8	10	-B		C		96	1.2	G	
845 ABST	17	0606	0607	0614	N26	E46	.730	16373	20.7	8	-N		C	0607	131	1.9	EJ	ZX
846 PURP	17	0637E	0637	0643	N29	W17	.435	16357	16.0	6D	?N		P				H	ZX
	IMP.1 NO : CULG YUNN TACH ABST MITK																	

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.		
GRP78847	17	0648+4	0658>9 0736+4	0754	N26	E42	.687	16373	20.4	66	2N						EIJV	
TELV	17	0648	0701	0746	N23	E40	.654	16373	20.3	58	1B	1	C		275	3.7	V	
ABST	17	0648	0700	0825D	N26	E45	.719	16373	20.7	97D	-N		P	0700	131	1.8	DJ	
CULG	17	0649U	0714U	0739D	N27	E40	.669	16373	20.3	50D	2N		C	0714	500	7.0		
YUNN	17	0650	0703	0730	N26	E42	.687	16373	20.4	40	2N		C		551	7.6		
TACH	17	0651	0709	0750	N26	E42	.687	16373	20.4	59	2N		C	0709	484	6.9	E	
ATHN	17	0652	0658	0738	N28	E45	.725	16373	20.7	46	1B	4	C		222		DE	
PURP	17	0658	0707	0800	N27	E39	.658	16373	20.2	62	2N		P		755	10.1		
KODA	17	0702E	0702	0730	N27	E43	.701	16373	20.5	28D	2N		P	0706	974	10.0	E	
HTPR	17	0706E		0800	N27	E43	.701	16373	20.5	54D	1N		C	0711	250	3.3	EI	
ABST	17	0730	0736	0750	N26	E45	.719	16373	20.7	20	1N	*	C	0736	174	2.5	EJ	
CATA	17	0735E	0740	0850	N27	E32	.578	16373	19.7	75D	1N	*	P	0740	168	2.1		
ABST	17	0800	0810	0820	N26	E45	.719	16373	20.7	20	1N	*	C	0810	174	2.5	EJ	
GRP78848	17	0653+1	0656+1	0710	N31	W17	.459	16357	16.0	17	-N				90	1.0	J	
ABST	17	0653	0656	0710	N32	W16	.463	16357	16.1	17	-N		C	0656	87	1.3	EJ	
TACH	17	0654	0657	0709	N31	W18	.467	16357	15.9	15	-N		C	0657	88	1.0	D	
GRP78849	17	0657+1	0659+2	0713	N31	00	.379	16366	17.3	16	-N				130	1.4	EJ	
ABST	17	0657	0659	0710	N31	E01	.379	16366	17.4	13	-N		C	0659	131	1.8	EJ	
TACH	17	0658	0701	0715	N31	W02	.380	16366	17.1	17	-N		C	0701	132	1.4	E	
GRP78850	17	0755+0	0800+0	0810	S12	E90	1.000	16379	24.1	15	-F				30			
CATA	17	0755	0800	0810	S11	E90	1.000	16379	24.1	15	-N	2	C	0800	39			
HTPR	17	0755	0800	0810	S13	E90	1.001	16379	24.1	15	-F		C	0800	20			
GRP78851	17	0803+3	0807+3	0823	N31	W01	.379	16366	17.3	20	1N				220	2.4	E	
PURP	17	0803	0807	0820	N31	W01	.379	16366	17.3	17	1N		C					
CATA	17	0805	0810	0845	N31	W02	.380	16366	17.2	40	1N	2	C	0810	224	2.5		
YUNN	17	0805	0810	0813	N31	W01	.379	16366	17.3	8	1N		C		321	3.6		
HTPR	17	0806	0808	0826	N30	W01	.363	16366	17.3	20	-N		C	0808	60	.7	E	
852 ABST	17	0822E	0825	0826D	S17	W85	.999	16372	11.0	4D	?N		P	0825	87		D	ZX
	IMP.1	NO #	PURP	YUNN	HTPR	CATA												
853 HTPR	17	0831	0832	0835	N23	W38	.630	16357	14.5	4	-F		C	0832	10	.1		ZX
854 KHAR	17	0849E		0927D	S19	W90	1.001	16372	10.6	38D	-N		P				H	ZX
855 HTPR	17	0917		0926D	N19	W80	.977	16380	11.4	9D	-F		C	0919	30			ZX
856 KHAR	17	0920E		0927D	N32	E01	.395	16366	17.5	7D	-F		P				E	ZX
857 HTPR	17	0937	0939	0941	N30	W21	.484	16357	15.8	4	-F		C	0939	20	.2		ZX
858 HTPR	17	0937	0942	0946	N24	W39	.646	16357	14.5	9	-F		C	0942	60	.8		ZX
859 KHAR	17	1111E		1128D	S15	E90	1.001	16379	24.2	17D	-N		P	1115			H	ZX
GRP78860	17	1111E	1115 1138+3	1153	N31	00	.379	16366	17.5	42	-B				110	1.2	E	
KHAR	17	1111E	1138	1145D	N32	W01	.395	16366	17.4	34D	1N		P	1141	275	3.1	E	
MONT	17	1112E	1115	1126	N32	E02	.396	16366	17.6	14D	-N		C	1115	100		E	
RAMY	17	1136	1139	1200	N30	W01	.363	16366	17.4	24	-B	3	C		79		FDE	
ATHN	17	1138E	1141	1215	N31	E00	.379	16366	17.5	37D	-B	4	C		111		DE	
ATHN	17	1144	1149	1152D	N31	E00	.379	16366	17.5	8D	-B	3	C		95		DE	
GRP78861	17	1121E		1145D	N19	W86	.993	16380	11.0	24	-F						EH	
KHAR	17	1121E		1145D	N18	W90	.999	16380	10.7	24D	-F		P	1124			H	
KHAR	17	1124E		1145D	N21	W82	.983	16380	11.3	21D	-F		P	1124			E	
862 KHAR	17	1127E		1145D	S18	W90	1.001	16372	10.7	18D	-F		P	1127			D	ZX
863 RAMY	17	1211	1212	1217	N31	W02	.380	16366	17.4	6	-F	3	C		21			ZX
GRP78864	17	1240+4	1247+2 1411	1424	N31	W04	.384	16366	17.2	104	-B				90	1.0		
RAMY	17	1240	1247	1500	N31	W04	.384	16366	17.2	140	-B	3	C		92		FDE	
ATHN	17	1244	1249	1313	N31	E00	.379	16366	17.5	29	-B	3	C		95		DE	
HOLL	17	1407	1411	1424	N30	W04	.368	16366	17.3	17	-N	3	C		51		F	
865 RAMY	17	1329	1329	1337	N28	E39	.662	16373	20.5	8	-N	3	C		21		F	ZX
GRP78866	17	1432	1435	1517D	N30	W03	.366	16366	17.4	45	-B							
HOLL	17	1432	1435	1440	N30	W04	.368	16366	17.3	8	-N	*	C		89		F	
HTPR	17	1442E		1554D	N30	W02	.364	16366	17.5	72D	1B	*	C	1444	220	2.5	E	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
867 RAMY	17	1441	1441	1516	N27	W27	.521	16357	15.6	35	-N	3	C		22		F	ZX
GRP78868	17	1442>9	1554 1603	1611	S13	E86	.999	16379	24.1	89	-N						E	
HTPR	17	1442E		1554D	S13	E86	.999	16379	24.1	72D	1N		C	1444	100		E	
RAMY	17	1538	1603	1613	S10	E80	.990	16379	23.7	35	-F	3	C					
BIGB	17	1550	1554	1608	S14	E89	1.000	16379	24.3	18	-B	2	C	1554	40	1.3		
GRP78869	17	1553+7	1604+1	1642	N31	W02	.380	16366	17.5	49	1B						I	
RAMY	17	1553	1605	1610D	N31	W06	.390	16366	17.2	17D	1B	*	C		300		FDE	
BIGB	17	1600	1604	1642	N31	W01	.379	16366	17.6	42	-N	*	C	1604	130	1.3		
HTPR	17	1612E		1623D	N30	W02	.364	16366	17.5	11D	1B	*	C	1615	350	4.0	I	
870 BIGB	17	1614	1617	1621	S13	E89	1.000	16379	24.4	7	-N	2	C	1617	30			ZX
871 BIGB	17	1623	1624	1631	S07	E14	.359	16368	18.7	8	-N	2	C	1624	50	.5		ZX
872 BIGB	17	1639	1640	1648	S13	E89	1.000	16379	24.4	9	-N	2	C	1640	30		A	ZX
873 BIGB	17	1701	1706	1714	S13	E89	1.000	16379	24.4	13	-N	2	C	1706	30		A	ZX
GRP78874	17	1743+8	1744+8	1751	N30	W22	.494	16357	16.1	8	-N							
BIGB	17	1743	1744	1751	N31	W21	.494	16357	16.2	8	-N	2	C	1744	10	1.4		
HOLL	17	1743	1744	1750	N30	W23	.504	16357	16.0	7	-B	3	C		38			
875 BIGB	17	1752	1753	1808	S13	E89	1.000	16379	24.4	16	-B	2	C	1753	30			ZX
876 BIGB	17	1905	1911	1923	S13	E85	.999	16379	24.2	18	-N	3	C	1911	40			ZX
877 BIGB	17	1923	1925	1930	N36	W07	.469	16366	17.3	7	-N	3	C	1925	30	.3		ZX
878 BIGB	17	1930	1931	1939	S13	E85	.999	16379	24.2	9	-B	3	C	1931	20			ZX
GRP78879	17	1935+1	1936+2	2006	S05	E17	.372	16368	19.1	31	-F				50	.5		
HOLL	17	1935	1936	2001	S05	E17	.372	16368	19.1	26	-F	2	C		50		F	
BIGB	17	1936	1938	2010	S07	E17	.393	16368	19.1	34	-F	3	C	1938	60	.6		
RAMY	17	1936	1937	1939D	S04	E16	.345	16368	19.0	3D	-F	3	C		22			
HUAN	17	1952E		2000D	S06	E18	.394	16368	19.2	8D	-F	1	P				D	
880 BIGB	17	2009	2012	2016	N32	W25	.542	16357	16.0	7	-F	2	C	2012	50	.6		ZX
881 CULG	17	2046	2051	2058	S13	E88	1.000	16379	24.5	12	-F		C	2051	40			ZX
882 HOLL	17	2047	2049	2055	N32	W06	.405	16366	17.4	8	-F	3	C		25			ZX
883 HOLL	17	2156	2156	2218	N32	W07	.409	16366	17.4	22	-B	3	C		23		F	ZX
884 HOLL	17	2234	2234	2248	S16	W02	.420	16370	17.8	14	-F	2	C		26			ZX
885 HOLL	17	2242	2242	2258	N28	E37	.640	16373	20.7	16	-F	2	C		24			ZX
886 HOLL	17	2318	2320	2329	N31	W11	.415	16366	17.1	11	-N	2	C		26			ZX
887 PURP	18	0011	0014	0026	N18	E19	.379	16368	19.4	15	-F		C					ZX
GRP78888	18	0019+4	0026+4	0047	N20	E31	.550	16373	20.3	28	1N						J	
PURP	18	0019	0026	0047	N20	E31	.550	16373	20.3	28	1N		C					
VORO	18	0023	0026	0046	N22	E32	.573	16373	20.4	23	1N		C	0026	179	2.2	EJ	
MANI	18	0028E	0030	0048	N20	E31	.550	16373	20.3	20D	-N	3	V		80	1.0	F	
889 PURP	18	0100E	0100	0115	S18	W03	.404	16370	17.8	15D	-F		P					ZX
890 YUNN	18	0340	0342	0346	N33	W12	.493	16366	17.3	6	-B		C		145	1.7	G	ZX
891 YUNN	18	0352	0354	0354D	N32	W26	.585	16357	16.2	2D	-N		C		161	2.0		ZX
892 YUNN	18	0352	0355	0400	S17	W05	.394	16370	17.8	8	?B	*	C		209	2.3		ZX
	IMP.1 NO 1 PURP																	
893 YUNN	18	0405	0409	0415	S14	E70	.952	16379	23.4	10	-F		C		32			ZX
894 YUNN	18	0406	0408	0410	N35	W16	.542	16366	17.0	4	-B		C		80	1.0		ZX
895 YUNN	18	0406	0408	0410	N32	W30	.622	16357	15.9	4	-N		C		48	.6		ZX
896 ABST	18	0602	0606	0645	N26	E35	.631	16373	20.9	43	?N		C	0606	174	2.3	EJ	ZX
	IMP.1 NO 1 PURP YUNN CULG TACH																	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq Deg.		
897 ABST	18	0633	0642	0648	S13	E70	.951	16379	23.5	15	?N		C	0642	87		D	ZX
	IMP.1	NO	PURP	YUNN	CULG	TACH												
898 ABST	18	0640	0644	0715	N31	W10	.454	16366	17.5	35	?N		C	0644	174	2.2	EJ	ZX
	IMP.1	NO	PURP	YUNN	CULG	TACH												
899 HTPR	18	0729E		0852	S15	E74	.971	16379	23.9	83D	-F		C	0833	30	.6		ZX
900 HTPR	18	0735	0735	0745	N26	E38	.575	16373	20.6	10	-F		C	0735	50	.6	E	ZX
GRP78901	18	0757+2	0758+2	0804	N32	W08	.460	16366	17.7	7	-N						DJ	
ABST	18	0757	0758	0800	N32	W08	.460	16366	17.7	3	-N		C	0758	131	1.6	DJ	
HTPR	18	0759	0800	0804	N32	W08	.460	16366	17.7	5	-F		C	0800	40	.4		
PURP	18	0759	0800	0809	N32	W06	.453	16366	17.9	10	1N		P					
GRP78902	18	0758+2	0805+3 0822	0845	N07	W27	.452	16363	16.3	47	-F						EJ	
ABST	18	0758	0808	0900	N07	W26	.436	16363	16.4	62	-N		C	0808	131	1.6	EJ	
PURP	18	0800	0822	0854	N06	W27	.452	16363	16.3	54	1F		C					
HTPR	18	0800	0805	0830	N07	W28	.467	16363	16.2	30	-F		C	0805	20	.2		
CATA	18	0830E	0830	0835D	N07	W27	.452	16363	16.3	5D	-N	2	P	0830	112	1.2		
GRP78903	18	0826+4	0830+1 0838	0900	N31	W12	.465	16366	17.5	34	-N				130	1.5	EJ	
HTPR	18	0826	0831	0900	N31	W15	.485	16366	17.2	34	-N		C	0831	50	.6	E	
ABST	18	0828	0830	0900	N32	W11	.474	16366	17.5	32	-N		C	0830	131	1.6	EJ	
CATA	18	0830E	0830	0835D	N31	W13	.471	16366	17.4	5D	-N	2	P	0830	140	1.6		
PURP	18	0830	0838	0846	N30	W11	.445	16366	17.5	16	1N		C					
904 ABST	18	0859	0919	1008	N26	W35	.631	16357	15.7	69	-N		C	0919	131	1.6	EJ	ZX
GRP78905	18	0901+5	0915+5 0938	0958	N26	E27	.542	16373	20.4	57	1B				180	2.2	IKV	
HTPR	18	0901	0919	1000	N26	E26	.531	16373	20.3	59	-B	*	C	0919	160	1.8	EI	
TELV	18	0901	0903	0903D	N22	E28	.524	16373	20.5	2D	-B	*	C		81	.9		
YUNN	18	0902	0920	0920D	N26	E26	.531	16373	20.3	18D	1B	*	C		393	4.7		
ATHN	18	0906	0915	0955	N25	E28	.546	16373	20.5	49	-B	*	C		143		FDE	
TELV	18	0912	0917	1105D	N22	E28	.524	16373	20.5	113D	1B	*	C		204	2.4	KV	
KODA	18	0925	0938	0948	N26	E27	.542	16373	20.4	23	2F	*	P	0934	916	9.4		
906 HTPR	18	0902	0904	0909	S14	E73	.966	16379	23.9	7	-F		C	0904	20	.4		ZX
GRP78907	18	0937+6	0947+6	1006	N31	W11	.460	16366	17.6	29	-B				130	1.5	EJ	
ABST	18	0937	0947	1008D	N32	W08	.460	16366	17.8	31D	1N		P	0947	174	2.2	EJ	
HTPR	18	0940	0950	1006	N31	W15	.485	16366	17.3	26	-B		C	0950	90	1.0	E	
YUNN	18	0943	0947	0947D	N32	W12	.479	16366	17.5	4D	1B		C		385	4.4	E	
ATHN	18	0950E	0953	0959	N31	W11	.460	16366	17.6	9D	-N	1		0953	98	1.1		
GRP78908	18	1000>9	1008+4	1040	N25	E33	.603	16373	20.9	40	-N				80	1.0	E	
HTPR	18	1000	1008	1030	N26	E32	.598	16373	20.8	30	-B	*	C	1008	70	.8	E	
ATHN	18	1010	1012	1050	N25	E34	.614	16373	21.0	40	-N	*		1012	98	1.1		
909 HTPR	18	1039	1042	1056	N30	W33	.636	16357	16.0	17	-N		C	1042	30	.3		ZX
910 HTPR	18	1214	1215	1218	N33	W10	.483	16366	17.8	4	-F		C	1215	20	.2		ZX
911 RAMY	18	1304	1306	1320	S16	W23	.521	16365	16.8	16	-F	3	C		34			ZX
GRP78912	18	1342>9	1401	1409	S12	E71	.955	16379	23.9	27	-F						D	
RAMY	18	1342	1401	1412	S11	E69	.944	16379	23.7	30	-F	*	C		30			
HUAN	18	1359		1405	S13	E73	.965	16379	24.1	6	-F	*	C				D	
GRP78913	18	1346+2	1352+2	1406	N30	W34	.645	16357	16.0	20	-B				60	.8		
HTPR	18	1346	1352	1407	N31	W34	.652	16357	16.0	21	-B		C	1352	50	.6		
RAMY	18	1348	1352	1405	N30	W34	.645	16357	16.0	17	-B	3	C		38			
ATHN	18	1350E	1354U	1400D	N28	W33	.622	16357	16.1	10D	-B	2	C		80		DE	
GRP78914	18	1412>9	1443	1452D	S12	E68	.939	16379	23.7	40	-F							
RAMY	18	1412	1622	1641	S11	E67	.932	16379	23.6	149	-N	*	C		19			
HTPR	18	1440	1443	1452	S13	E70	.951	16379	23.9	12	-F	*	C	1443	10	.2		
915 HTPR	18	1414	1415	1418	N33	W22	.561	16366	16.9	4	-F		C	1415	20	.2		ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78916	18	1437+1	1440+2 1459	1500	N35	W22	.583	16366	17.0	23	-N						EH	
HTPR	18	1437	1440	1505	N35	W22	.583	16366	17.0	28	-N		C	1440	120	1.5	E	
RAMY	18	1438	1442	1453	N32	W22	.551	16366	17.0	15	-N	3	C		45		F H	
HUAN	18	1439E		1440D	N35	W21	.576	16366	17.0	1D	-N	1	P				E	
HTPR	18	1451	1459	1506	N35	W23	.591	16366	16.9	15	-F		C	1459	20	.2		
GRP78917	18	1505+1	1506+2	1514	N31	W16	.492	16366	17.4	9	-N				20	.2		
HTPR	18	1505	1508	1515	N31	W15	.485	16366	17.5	10	-F		C	1508	10	.1		
RAMY	18	1506	1506	1513	N31	W18	.507	16366	17.3	7	-B	3	C		25			
GRP78918	18	1528+0	1529+1	1557	N27	W40	.690	16357	15.6	37	-N				90	1.3	E	
HTPR	18	1520	1530	1550	N28	W41	.705	16357	15.6	30	-N		C	1530	80	1.8	E	
RAMY	18	1520	1529	1603	N27	W40	.690	16357	15.6	43	-N	3	C		95			
GRP78919	18	1744+1	1746+0	1752	S12	E65	.920	16379	23.6	8	-N				60			
BIGB	18	1744	1746	1751	S14	E66	.929	16379	23.7	7	-B	2	C	1746	50			
RAMY	18	1745	1746	1753	S10	E65	.918	16379	23.6	8	-N	3	C		70			
	18	2107	2118	NO FLARE PATROL														
	18	2119	2122	NO FLARE PATROL														
	18	2126	2312	NO FLARE PATROL														
	18	2319	2325	NO FLARE PATROL														
920 CULG	18	2325E	2331U	0023	S14	E65	.923	16379	23.9	58D	-F		C	2331	60	1.5		ZX
921 CULG	18	2349	2355	0009	N22	E21	.439	16373	20.6	20	-N		C	2355	140	1.5		ZX
GRP78922	19	0018+7	0024+6 0100	0122	N28	E19	.481	16373	20.4	64	2N				490	5.6	EJ	
CULG	19	0018	0029	0202U	N28	E19	.481	16373	20.4	104D	2N		C	0029	600	6.9		
VORO	19	0020	0024	0113	N29	E19	.493	16373	20.4	53	1F		C	0024	430	5.1	EJ	
PURP	19	0022	0030	0130	N28	E19	.481	16373	20.4	68	2N		C		604	6.9		
YUNN	19	0025	0027	0032	N26	E17	.440	16373	20.3	7	1B		C		321	3.6	E	
YUNN	19	0055	0100	0114	N26	E17	.440	16373	20.3	19	1B		C		257	2.9		
GRP78923	19	0415+3	0419+4	0446	N26	E21	.479	16373	20.8	31	2N						E	
YUNN	19	0415	0422	0446	N26	E18	.449	16373	20.5	31	2B		C		802	9.1		
PURP	19	0418	0423	0535	N26	E23	.500	16373	20.9	77	3N		C		1510	17.4		
KODA	19	0419E	0419	0444	N26	E21	.479	16373	20.8	25D	2F		V	0419			E	
924 YUNN	19	0439	0442	0446	N32	W24	.569	16366	17.4	7	?B		C		257	3.1	E	ZX
	IMP.1 NO 1 PURP																	
925 HTPR	19	0719	0720	0724	N34	W35	.683	16366	16.7	5	-F		C	0720	20	.3	E	ZX
926 HTPR	19	0728	0729	0736	N31	W47	.775	16357	15.8	8	-F		C	0728	20	.3	E	ZX
927 MONT	19	0836	0838	0845	N36	W35	.697	16366	16.7	9	-F		C	0838	50		E	ZX
GRP78928	19	0942+3	0945+3	1001	N32	W27	.595	16366	17.4	19	1N				240	3.0	E	
CATA	19	0930	0945	1155	N30	W27	.577	16366	17.4	145	1N	2	C	0945	337	4.2	T	
MONT	19	0942	0948	1001	N36	W35	.697	16366	16.8	19	-F		C	0948	70		E	
YUNN	19	0945	0947	0958	N32	W24	.569	16366	17.6	13	1B		C		241	2.9	E	
GRP78929	19	1050+9	1105+0 1119+3	1135	N29	E15	.460	16373	20.6	45	-B				170	1.9	EI	
HTPR	19	1050	1112	1145	N27	E14	.426	16373	20.5	55	-B		C	1112	150	1.7	EI	
CATA	19	1055	1105	1135	N29	E15	.460	16373	20.6	40	1B	2	C	1105	224	2.6		
BERN	19	1059	1105	1117	N30	E18	.496	16373	20.8	18	-N		C		120			
ABST	19	1118D	1119	1136D	N28	E15	.447	16373	20.6	18D	-N		P	1119	87	1.2	D	
MONT	19	1120E	1122	1135	N29	E14	.453	16373	20.5	15D	-F		C	1122	60		E	
GRP78930	19	1100	1119+1 1127+1	1145	N31	W30	.615	16366	17.2	45	-N				80	1.0	EV	
HTPR	19	1100	1120	1145	N29	W29	.589	16366	17.3	45	-N	*	C	1120	70	.8		
ABST	19	1118D	1119	1136D	N28	W29	.581	16366	17.3	18D	-N	*	P	1119	87	1.1	D	
HTPR	19	1126	1128	1132	N34	W32	.657	16366	17.1	6	-F	*	C	1128	30	.3	E	
ABST	19	1126	1127	1136D	N33	W31	.640	16366	17.2	10D	-N	*	P	1127	87	1.2	DV	
931 TELV	19	1146	1149	1149D	N25	E13	.392	16373	20.5	30	-N	3	C		163	1.7	V	ZX

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	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78932	19	1153+2	1157+6	1335	N28	E13	.432	16373	20.5	102	2B				620	6.9		
HTPR	19	1153	1158	1335	N27	E15	.434	16373	20.6	102	2B		C	1158	680	6.6	E	
RAMY	19	1154	1157	1158D	N28	E12	.425	16373	20.4	4D	1B	3	C		380		FDE	
MONT	19	1154	1158	1320D	N29	E14	.453	16373	20.5	86D	2B		C	1158	1100			
CATA	19	1155	1203	1250D	N28	E12	.425	16373	20.4	55D	2B	2	P	1203	646	7.3		
WEND	19	1248E		1325	N28	E14	.439	16373	20.6	37D	1N		V	1302	420	5.0	BF	
HUAN	19	1327E		1338D	N26	E11	.390	16373	20.4	11D	-F	1	P					
933 RAMY	19	1315	1316	1325	S17	W23	.531	16370	17.8	9	-F	3	C		20			ZX
934 HTPR	19	1343	1344	1352	S16	E48	.790	16379	23.2	9	-F		C	1343	40	.6	E	ZX
GRP78935	19	1429+6	1439+1	1509	N34	W40	.727	16366	16.6	40	-N				70	1.0	D	
HTPR	19	1429	1439	1520	N34	W42	.745	16366	16.5	51	-B		C	1439	100	1.4		
WEND	19	1438		1501	N34	W39	.718	16366	16.7	31	1N		V	1448	200	3.2	D	
HUAN	19	1431	1440	1507	N34	W40	.727	16366	16.6	36	-N	2	C	1440	50	.7		
RAMY	19	1435	1439	1510	N32	W41	.725	16366	16.5	35	-B	3	C		62			
936 HUAN	19	1500	1502	1504	N29	E13	.445	16373	20.6	4	-F	1	C	1502	20	.2	D	ZX
GRP78937	19	1620+1	1621+0	1633	N27	E11	.404	16373	20.5	13	-N				50	.5	F	
BIGB	19	1620	1621	1633	N28	E13	.432	16373	20.7	13	-N	2	C	1621	50	.5		
RAMY	19	1621	1621	1633	N26	E10	.383	16373	20.4	12	-B	3	C		63		F	
938 BIGB	19	1752	1753	1758	N33	W34	.667	16366	17.2	6	-N	1	C	1753	40	.5		ZX
939 BIGB	19	1828	1830	1844	S14	E55	.848	16379	23.9	16	-N	1	C	1830	70	1.3		ZX
940 PALE	19	1901	1902	1905	N31	W32	.634	16366	17.4	4	-F	3	C		22		DE	ZX
GRP78941	19	1909+5	1912+2	1917	S07	W12	.299	16368	18.9	8	-F				35	.4		
RAMY	19	1909	1912	1917	S07	W13	.310	16368	18.8	8	-F	3	C		23			
PALE	19	1914	1914	1916	S07	W12	.299	16368	18.9	2	-F	3	C		52		DE	
942 PALE	19	1920	1921	1922	N26	E13	.405	16373	20.8	2	-F	3	C		23			ZX
943 PALE	19	1920	1923	1925	N30	W30	.607	16366	17.6	5	-F	3	C		20		F	ZX
GRP78944	19	1940+0	1941+7	1959	N29	E10	.427	16373	20.6	19	-N				90	1.0		
PALE	19	1940	1943	1959	N29	E10	.427	16373	20.6	19	-N	3	C		103		FDE	
RAMY	19	1948	1941	1956	N29	E10	.427	16373	20.6	16	-N	3	C		53			
BIGB	19	1946E	1948	2020	N27	E14	.426	16373	20.9	34D	-N	1	P	1948	110	1.2		
945 PALE	19	2011E	2017	2024	S12	E36	.641	16379	22.5	13D	-F	3	C		25		DE	ZX
GRP78946	19	2011E	2025+2	2059	N31	W31	.624	16366	17.5	48	-N				90	1.2		
PALE	19	2011E	2027	2100	N31	W31	.624	16366	17.5	49D	-N	3	C		106		FDE	
BIGB	19	2019E	2025	2058	N33	W30	.631	16366	17.6	39D	-N	1	P	2025	70	.8		
HUAN	19	2036E		2041D	N31	W32	.634	16366	17.5	5D	-N	1	P	2037	40	.5	E	
947 CULG	19	2217	2224	2253	N27	W38	.669	16366	17.1	36	?N		C	2224	240	3.4	F	ZX
	IMP.1 NO : HOLL PALE																	
GRP78948	19	2314	2316+2	2352	N26	E09	.377	16373	20.6	38	1N						J	
VORO	19	2314	2318	2345	N28	E06	.393	16373	20.4	31	1N		C	2318	403	4.5	EJ	
PALE	19	2316E	2316U	2339D	N26	E09	.377	16373	20.6	23D	-N	3	C		150		F	
PURP	19	2332E	2332	2359	N26	E09	.377	16373	20.7	27D	2N	*	P		830	9.0		
949 CULG	19	2324	2329	2347	N10	E58	.844	16381	24.3	23	-N		C	2329	80	1.5		ZX
950 CULG	19	2335	2343	0017	N17	E62	.923	16381	25.1	42	-N		C	2343	50	1.0	F	ZX
951 VORO	20	0003	0007	0014	N31	W56	.850	16357	15.8	11	-N		C	0007	99	1.9	E	ZX
GRP78952	20	0011>9	0011 2423	0033	N25	E09	.364	16373	20.7	***	-F						E	
VORO	20	0022	0023	0028	N28	E08	.403	16373	20.6	6	-F	*	C	0023	108	1.2	E	
CULG	19	2337	2411	0037	N22	E11	.335	16373	20.8	60	-N	*	C	2411	120	1.3		
953 CULG	20	0023	0037	0044D	S22	E22	.573	16374	21.7	21D	-N		C	0037	140	1.7		ZX
954 VORO	20	0042	0044	0059	S06	W17	.350	16368	18.8	17	-N		C	0044	116	1.2	E	ZX
955 YUNN	20	0256	0305	0310	N33	W35	.677	16366	17.5	14	?N		C		173	2.3		ZX
	IMP.1 NO : MITK PURP																	
956 YUNN	20	0305E	0305	0315	N28	E08	.403	16373	20.7	10D	?N		C		267	2.9	E	ZX
	IMP.1 NO : MITK PURP																	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP DAY	MIN.		CONG.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78957	20	0552+3	0556+1	0634	N27	E04	.372	16373	20.5	42	2N				710	7.7	E	
CULG	20	0552	0556	0607D	N27	E04	.372	16373	20.5	15D	1N		C	0556	350	3.9		
KODA	20	0554E	0557	0628	N26	E03	.353	16373	20.5	34D	2N		P	0600	713	7.4	E	
PURP	20	0555	0557	0640	N27	E04	.372	16373	20.5	45	2N		C		981	10.5		
YUNN	20	0608E	0608	0620	N28	E04	.388	16373	20.6	12D	1N		C		283	3.0	E	
CATA	20	0648E	0655	0655D	N26	W04	.356	16373	20.0	15D	1N	1	P	0655	252	2.7		
GRP78958	20	0736+9	0741+4	0750	N30	W60	.878	16357	15.8	14	-B				60	1.3	E	
HTPR	20	0736	0741	0825	N30	W60	.878	16357	15.8	49	-B		C	0741	50	1.0	E	
YUNN	20	0740	0744	0746	N32	W60	.881	16357	15.8	6	-N		C		80	1.7		
CATA	20	0745	0745	0750	N28	W61	.882	16357	15.7	5	-B	2	C	0745	56	1.2		
959 CATA	20	0800	0805	0825	N28	W60	.875	16357	15.8	25	-N	2	C	0805	56	1.1		ZX
GRP78960	20	0808+2	0805+8	0812	N33	W43	.749	16366	17.1	12	1F				140	2.2	E	
CATA	20	0800	0805	0810	N33	W43	.749	16366	17.1	10	1N	2	C	0805	140	2.1		
HTPR	20	0802	0805	0813	N34	W44	.762	16366	17.0	11	-F		C	0805	140	2.0	E	
GRP78961	20	0944+2	0945+7	1008	N26	E04	.356	16373	20.7	24	-N				70	.8	E	
WEND	20	0944		1010D	N27	E01	.367	16373	20.5	26D	-F		V		160	1.9	T	
CATA	20	0945	0945	0955	N26	W03	.353	16373	20.2	10	-B	1	C	0945	112	1.2		
HTPR	20	0945	0949	1006	N27	E05	.375	16373	20.8	21	-N		C	0949	60	.6	E	
MONT	20	0946	0948	1008	N22	E05	.296	16373	20.8	22	-F		C	0948	50		E	
ATHN	20	0950E	0952U	1013	N25	E09	.364	16373	21.1	23D	-B	3	C		48		DE	
962 CATA	20	1020	1025	1035	S15	E90	1.000	16384	27.2	15	?F	2	C	1025	56			ZX
	IMP.1	NO	HTPR	BERN	MONT													
963 HTPR	20	1025	1028	1034	N30	W60	.878	16357	15.9	9	-F		C	1028	50	1.0		ZX
GRP78964	20	1105+4	1111+6	1129	S06	W20	.391	16368	19.0	24	-F				110	1.2	E	
HTPR	20	1105	1117	1140	S06	W20	.391	16368	19.0	35	-F		C	1117	150	1.5	E	
MONT	20	1109	1111	1118	S07	W21	.413	16368	18.9	9	-N		C	1111	80		E	
GRP78965	20	1111+7	1113	1131	N30	W60	.878	16357	16.0	20	-F						Z	
HTPR	20	1111	1113	1132	N30	W61	.885	16357	15.9	21	-F		C	1113	20	.4		
WEND	20	1118		1130	N31	W60	.879	16357	16.0	12	1F		V		140	3.4	Z	
966 HTPR	20	1123	1126	1142	S12	E29	.555	16379	22.6	19	-F		C	1126	60	.7	E	ZX
GRP78967	20	1144+8	1155+5 1215+1	1242	N26	E01	.351	16373	20.6	58	1B						I	
HTPR	20	1144	1146	1155	N26	E06	.363	16373	20.9	11	-F		C	1146	20	.2		
BERN	20	1147	1216	1240	N28	W02	.384	16373	20.3	53	-N		C		180			
WEND	20	1151	1155	1248	N27	E01	.367	16373	20.6	57	1N		V	1202	440	5.1	T	
MONT	20	1151	1156	1156D	N28	E04	.388	16373	20.8	5D	-N		C	1156	70			
HTPR	20	1151	1158	1255	N27	E02	.368	16373	20.6	64	-B		C	1158	150	1.7	EI	
RAMY	20	1152	1155	1233	N26	W01	.351	16373	20.4	41	1B	3	C		210		F	
ATHN	20	1153E	1155U	1230	N24	E08	.343	16373	21.1	37D	-B	3	C		127		F	
CATA	20	1200	1200	1250D	N27	W01	.367	16373	20.4	50D	2B	2	P	1200	562	6.2		
LVOV	20	1214	1215	1238	N24	W02	.319	16373	20.4	24	1N		P	1215	400	4.4	BEI	
968 RAMY	20	1237	1237	1243	N31	W42	.730	16366	17.4	6	-N	3	C		21			ZX
969 HTPR	20	1258		1308D	N21	E05	.280	16373	20.9	10D	-F		C	1302	20	.2		ZX
970 HTPR	20	1325		1359D	N26	E15	.423	16378	21.7	34D	-F		C	1334	20	.2		ZX
971 HUAN	20	1356		1358	N24	W01	.318	16373	20.5	2	-F	1	C					ZX
GRP78972	20	1424+0	1425+0	1428	N25	W63	.893	16357	15.9	4	-F				25	.6		
HUAN	20	1424	1425	1428	N26	W64	.901	16357	15.8	4	-F	1	C	1425	30			
RAMY	20	1424	1425	1428	N24	W63	.892	16357	15.9	4	-N	3	C		24			
GRP78973	20	1439+1	1441+4	1505	N26	W01	.351	16373	20.5	26	-N				190	2.0		
HUAN	20	1439	1443	1520	N27	E00	.367	16373	20.6	41	-N	2	C	1443	165	1.8	E	
WEND	20	1440	1445	1506	N27	W01	.367	16373	20.5	26	1N		V	1445	300	3.5	T	
RAMY	20	1440	1441	1503	N26	W02	.352	16373	20.5	23	-B	3	C		162		DE	
HOLL	20	1440	1441U	1503	N26	W02	.352	16373	20.5	23	-N	1	C		150		F	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP78974	20	1511>9	1522+3	1601	N27	W02	.368	16373	20.5	50	-N				170	1.8		
BERN	20	1511	1524	1545	N28	W04	.388	16373	20.3	34	-N		C		130			
WEND	20	1518	1525	1558	N27	W02	.368	16373	20.5	40	1N		V	1525	280	3.2	T	
RAMY	20	1520	1522	1602	N27	W02	.368	16373	20.5	42	-B	3	C		173		DE	
HUAN	20	1521		1603	N25	W03	.337	16373	20.4	42	-N	1	C	1523	120	1.3	E	
HOLL	20	1522	1522	1617	N27	W02	.368	16373	20.5	55	1N	2	C		211		F	
975 RAMY	20	1546	1546	1553	N27	W66	.915	16357	15.7	7	-N	3	C		13			ZX
976 RAMY	20	1658	1700	1706	N24	W66	.913	16357	15.8	8	-N	3	C		22			ZX
977 HOLL	20	1734	1737	1742	S09	E26	.495	16379	22.7	8	-F	3	C		19			ZX
GRP78978	20	1824+0	1828+1	1934	N26	W02	.352	16373	20.6	70	2B				900	9.6	UZ	
HOLL	20	1824	1829	1931	N26	W01	.351	16373	20.7	67	2B	3	C		916		UDE	
RAMY	20	1824	1828	1937D	N26	W04	.356	16373	20.5	73D	2B	3	C		890		ZDE	
	20	1840	1912	NO FLARE PATROL														
GRP78979	20	2005+6	2014+5	2033	N28	W65	.909	16357	16.0	28	-F				45		E	
HOLL	20	2005	2014	2033	N26	W66	.914	16357	15.9	28	-N	3	C		48			
HUAN	20	2011		2025	N29	W65	.910	16357	16.0	14	-F	1	C	2014	40		E	
PALE	20	2016E	2019	2033	N30	W66	.917	16357	15.9	17D	-F	3	C		60		DE	
RAMY	20	2022E	2022U	2042D	N27	W65	.908	16357	16.0	20D	-F	3	C		11			
GRP78980	20	2013>9	2036 2104	2138	N26	W02	.352	16373	20.7	85	-N							
HOLL	20	2013	2036	2155	N26	W02	.352	16373	20.7	102	-N	3	C		61			
PALE	20	2052	2104	2128	N26	W06	.363	16373	20.4	36	-F	3	C		67		FDE	
CULG	20	2055E	2055U	2119	N28	W05	.391	16373	20.5	24D	1N		C	2055	300	3.3		
CULG	20	2117	2122	2138	N27	E03	.370	16373	21.1	21	-N		C	2122	150	1.6		
GRP78981	20	2212+2	2217+4	2309	N19	E52	.792	16381	24.8	57	2N						LUV	
CULG	20	2212	2219	2308	N19	E53	.802	16381	24.9	56	2B		C	2219	650	11.2	VL	
HOLL	20	2214	2221	2309	N23	E52	.799	16381	24.8	55	2N	3	C		1024		UDE	
PALE	20	2215E	2217	2344D	N19	E52	.792	16381	24.8	89D	1N	3	C		354		U F	
GRP78982	20	2222>9	2231 2252	2255	N28	W05	.391	16373	20.6	33	1F						EHJL	
CULG	20	2222	2231	2249	N28	W07	.398	16373	20.4	27	1N		C	2231	230	2.5	LH	
VORO	20	2243	2244	2259	N27	W06	.379	16373	20.5	16	1F		C	2244	188	2.0	EJ	
VORO	20	2252	2252	2300	N28	E01	.383	16373	21.0	8	1F		C	2252	197	2.1	EHJ	
983 TELV	21	0121	0124	0147D	N23	W11	.351	16373	20.2	26D	-B	1	C		163	1.7	UV	ZX
984 PURP	21	0351E	0351	0351D	N28	W04	.389	16373	20.9		?N		C					ZX
	IMP.1	NO ! MITK		CULG														
985 CULG	21	0351	0357	0459	S30	E07	.588	16374	21.7	68	-N	*	C	0357	140	1.6	H	ZX
GRP78986	21	0452+6	0458+4	0527	N27	W06	.380	16373	20.8	35	-N				180	2.0	E	
PURP	21	0452	0458	0527	N28	W05	.392	16373	20.8	35	1N		C					
YUNN	21	0455	0458	0516	N28	W06	.395	16373	20.8	21	-B		C		145	1.6	E	
MANI	21	0458	0502	0506D	N27	W06	.380	16373	20.8	8D	-N	3	C		180		F	
TACH	21	0500E		0528	N27	W08	.389	16373	20.6	28D	1F		C	0507	317	3.5	E	
GRP78987	21	0517+3	0523+1	0532	N28	W73	.954	16357	15.7	15	-F				70		DH	
CULG	21	0517	0523	0536	N29	W73	.954	16357	15.7	19	-F		C	0523	60		HT	
TACH	21	0520	0524	0528	N27	W74	.958	16357	15.7	8	-N		C	0524	78		D	
988 PURP	21	0550		0558	N28	W05	.392	16373	20.9	8	-N		P				H	ZX
GRP78989	21	0624	0635+3	0653	N29	W51	.805	16366	17.4	29	-N				70	1.2	EJ	
ABST	21	0624	0638	0650	N29	W52	.813	16366	17.4	26	-N		C	0638	87	1.5	EJ	
CATA	21	0635E	0635	0655	N30	W50	.799	16366	17.5	20D	-N	2	P	0635	56	.9		
GRP78990	21	0625	0635+2	0655	N21	W06	.286	16373	20.8	30	-F						F	
CULG	21	0625	0637	0654	N23	W07	.323	16373	20.7	29	-F		C	0637	160	1.7	F	
CATA	21	0635E	0635	0655	N20	W05	.265	16373	20.9	20D	-N	2	P	0635	56	.6		
991 CULG	21	0633	0645	0732	S14	W64	.916	16365	16.5	59	-F		C	0645	50			ZX
GRP78992	21	0647>9	0658+7 0712	0732	N26	W10	.386	16373	20.5	45	1N						J	
ABST	21	0647	0658	0740	N26	W11	.393	16373	20.5	53	-N	*	C	0658	174	1.9	DJ	
PURP	21	0652	0700	0723	N28	W06	.395	16373	20.8	31	1N	*	C					
CATA	21	0655	0705	0750	N26	W11	.393	16373	20.5	55	1N	*	C	0705	196	2.2		
YUNN	21	0657	0712	0715	N26	W10	.386	16373	20.5	18	1N	*	C		361	4.0	E	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq Deg		
993 CATA	21	0900	0905	0930	N29	W15	.462	16373	20.3	30	?N	2	C	0905	224	2.6		ZX
	IMP.1 NO : YUNN																	
994 CATA	21	1035	1040	1110	N08	W33	.543	16368	19.0	35	1N	2	C	1040	224	2.8		ZX
995 RAMY	21	1122	1125	1132	N25	W13	.394	16373	20.5	10	-F	3	C		20			ZX
GRP78996	21	1216+4	1219+3 1235	1305	N30	W77	.970	16357	15.7	49	1B							
RAMY	21	1216	1219	1305	N28	W72	.949	16357	16.1	49	-B	3	C		32		DE	
ATHN	21	1218E	1222U	13020	N33	W80	.981	16357	15.5	440	1B	3	C		95		DE	
CATA	21	1220	1235	1250D	N30	W77	.970	16357	15.7	300	2N	2	P	1235	196			
GRP78997	21	1324+0	1329+2	1431	N26	W15	.424	16373	20.4	67	1B				320	3.5		
HUAN	21	1324	1331	1431	N26	W15	.424	16373	20.4	67	1N	2	C	1331	360	4.1	E	
RAMY	21	1324	1329	14150	N26	W09	.380	16373	20.9	510	1B	3	C		387			
ATHN	21	1328E	1330U	13450	N27	W18	.463	16373	20.2	170	1B	3	C		206		F	
998 HUAN	21	1451	1454	1454	N24	W15	.399	16373	20.5	3	-N	1	C	1454	60	.6		ZX
999 HUAN	21	1541		1547	N26	W54	.823	16366	17.6	6	-F	1	C					ZX
0 BIGB	21	1644	1645	1712	N31	W80	.980	16357	15.7	28	-N	1	C	1645	40			ZX
1 HUAN	21	1824E		1827	N24	E70	.937	16386	27.0	30	-F	1	P				E	ZX
GRP79002	21	1846	1848	1924	S12	E27	.530	16379	23.8	38	-N				80	.9	E	
BIGB	21	1846	1848U	1924	S12	E27	.530	16379	23.8	38	-N	1	P	1848	90	1.0		
HUAN	21	1847E		18490	S12	E27	.530	16379	23.8	20	-N	1	P	1849	65	.7	E	
3 BIGB	21	2009	2010	2028	N32	W80	.980	16357	15.8	19	-B	1	C	2010	20			ZX
4 CULG	21	2101	2123	2218	N28	W15	.449	16373	20.8	77	?N		C	2123	260	2.9	UF	ZX
	IMP.1 NO : BIGB PALE																	
5 CULG	21	2105	2111	2124	N41	W79	.979		16.0	19	-F		C	2111	30			ZX
6 PALE	21	2106	2116	2143	N14	W26	.454	16368	19.9	37	-F	3	C		57		U F	ZX
7 CULG	21	2108	2129	2218	S18	E13	.449	16375	22.9	70	?F		C	2129	280	2.9	F	ZX
	IMP.1 NO : BIGB PALE																	
8 CULG	21	2125	2129	2138	N15	E62	.880	16386	26.5	13	-F		C	2129	30	.6		ZX
9 CULG	21	2126	2140	2206	S06	W41	.676	16368	18.8	40	-N		C	2140	140	1.8		ZX
10 CULG	21	2251	2258	2304U	S22	W25	.598		20.1	130	-N		C	2258	80	.9		ZX
11 CULG	21	2252	2257	2303U	S07	W42	.691	16368	18.8	110	-F		C	2257	30	.4		ZX
12 CULG	21	2338	2346	0003	S06	W42	.688	16368	18.8	25	?F		C	2346	160	2.1		ZX
	IMP.1 NO : BIGB																	
GRP79013	22	0024>9	0105	01100	N22	W17	.397	16373	20.7	46	-F						E	
CULG	22	0024	0113	0215U	N24	W19	.448	16373	20.6	1110	-N		C	0113	190	1.9		
VORO	22	0104	0105	0110	N20	W15	.353	16373	20.9	6	-F		C	0105	134	1.4	E	
GRP79014	22	0048+8	0057>9	0123	N10	E67	.917	16386	27.1	35	-N						F	
CULG	22	0048	0107	0210	N10	E62	.924	16386	27.1	82	1N		C	0107	180		F	
PALE	22	0054	0105	0142	N12	E67	.917	16386	27.1	48	1N	3	C		193		F	
PALE	22	0054	0057	0107	N12	E67	.917	16386	27.1	13	1N	3	C		193		F	
PURP	22	0055E	0055	0114	N10	E64	.895	16386	26.8	190	-F		P					
VORO	22	0056	0105	0114	N10	E70	.936	16386	27.3	18	-N		C	0105	72		E	
MANI	22	0100E	0100U	0110	N11	E67	.917	16386	27.1	100	-N	3	C		50			
15 VORO	22	0208	0210	0218	N20	W40	.663	16368	19.1	10	-F		C	0210	108	1.4	DH	ZX
16 CULG	22	0336	0341	0352	S14	W78	.984	16365	16.3	16	-F		C	0341	60			ZX
GRP79017	22	0519+2	0524+1	0539	S16	W15	.438	16377	21.1	20	-N							
CULG	22	0519	0524	0550	S16	W17	.457	16377	20.9	31	1N		C	0524	280	3.1		
PURP	22	0521	0525	0528,	S16	W14	.429	16377	21.2	7	-N		C					
18 CULG	22	0525	0527	0535	S14	W79	.987	16365	16.3	10	-F		C	0527	20			ZX

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP79019	22	0630+7	0630+8	0649	N26	W16	.434	16373	21.1	19	-N				80	.9		
YUNN	22	0630E	0630	0644	N26	W15	.425	16373	21.1	14D	-N		C		64	.7		
MANI	22	0632E	0634	0653	N26	W16	.434	16373	21.1	21D	-N	3	C		100			
PURP	22	0637	0638	0649	N27	W18	.464	16373	20.9	12	1B		C					
GRP79020	22	0636+1	0639+0	0644	S12	E16	.399	16379	23.5	8	-N						L	
CULG	22	0636	0639	0647	S11	E14	.366	16379	23.3	11	-N		C	0639	90	1.0	L	
PURP	22	0637	0639	0641	S13	E18	.432	16379	23.6	4	-N		C					
21 HONT	22	0921	0922	0926	N28	W20	.494	16373	20.9	5	-F		C	0922	60		E	ZX
22 HONT	22	1011	1012	1017	N28	W21	.503	16373	20.8	6	-F		C	1012	50		E	ZX
23 HONT	22	1036	1038	1047	N28	W21	.503	16373	20.9	11	-F		C	1038	60		E	ZX
24 HONT	22	1040	1041	1044	N29	W66	.917	16366	17.5	4	-F		C	1041	60			ZX
	22	1225	1235	NO FLARE PATROL														
25 RAMY	22	1258	1301	1314	N26	W25	.524	16373	20.7	16	-N	3	C		37		F	ZX
	22	1314	1324	NO FLARE PATROL														
26 RAMY	22	1335	1335	1402	S10	E00	.264	16379	22.6	27	-F	3	C		21			ZX
27 RAMY	22	1354	1355	1408	N26	W25	.524	16373	20.7	14	-F	3	C		34			ZX
	22	1357	1510	NO FLARE PATROL														
28 RAMY	22	1410	1419	1502D	N12	E56	.826	16386	26.8	52D	-F	3	C		51			ZX
29 BIGB	22	1510E	1514	1544	N11	E58	.844	16386	27.0	34D	-F	1	P	1514	20	.4		ZX
30 RAMY	22	1536	1536	1544	N29	W83	.989	16366	16.4	8	-B	3	C					ZX
GRP79031	22	1541+1	1543+1	1611	N27	W24	.523	16373	20.9	30	-B							
RAMY	22	1541	1543	1623	N26	W26	.535	16373	20.7	42	-B	3	C		85		DE	
BIGB	22	1542	1544	1558	N29	W23	.532	16373	20.9	16	-B	1	C	1544	20	.2		
GRP79032	22	1713+6	1721+1 1728	1733	N31	W75	.963	16366	17.1	20	-N				30		F	
RAMY	22	1713	1728	1731	N29	W84	.991	16366	16.4	18	-F	3	C		15			
BIGB	22	1718	1721	1738	N31	W75	.963	16366	17.1	20	-B	1	C	1721	40			
PALE	22	1719	1722	1733	N32	W75	.963	16366	17.1	14	-N	3	C		16		F	
GRP79033	22	1808+0	1810+1	1822	N19	W50	.772	16368	19.0	14	-N				35	.6		
BIGB	22	1808	1811	1825	N20	W50	.774	16368	19.0	17	-N	1	C	1811	40	.6		
RAMY	22	1808	1810	1818	N18	W50	.771	16368	19.0	10	-N	3	C		25			
GRP79034	22	1810+9	1820+5	1844	N27	W27	.554	16373	20.7	34	-N				70	.8	U	
RAMY	22	1810	1820	1920	N27	W27	.554	16373	20.7	70	-B	3	C		85		FDE	
PALE	22	1810	1825	1844	N27	W27	.554	16373	20.7	34	-N	3	C		83		U F	
BIGB	22	1819	1822	1834	N30	W25	.561	16373	20.9	15	-N	2	C	1822	40	.5		
35 RAMY	22	1816	1829	1857	N29	W85	.993	16366	16.4	41	-F	3	C		25			ZX
36 PALE	22	1904	1904	1920	N27	W27	.554	16373	20.8	16	-F	3	C		20		F	ZX
37 RAMY	22	1905	1917	1925	N28	W78	.974	16366	16.9	20	-F	3	C					ZX
	22	1940	1948	NO FLARE PATROL														
GRP79038	22	2030+1	2032 2037>9	2129	N12	E55	.816	16386	27.0	59	-N				50	.9	HU	
HOLL	22	1726	2047	2048D	N14	E57	.836	16386	27.0	202D	1N	3	C		364		U	
BIGB	22	2030	2037	2104D	N10	E55	.816	16386	27.0	34D	-N	1	P	2037	50	.9		
RAMY	22	2031	2032	2118	N12	E53	.796	16386	26.8	47	-N	3	C		45			
PALE	22	2041E	2042U	2111D	N12	E55	.816	16386	27.0	30D	-N	3	C		28		U H	
HOLL	22	2046	2051	2140	N14	E57	.836	16386	27.1	54	1N	*	C		229		U	
39 RAMY	22	2107	2109	2120	N26	W29	.567	16373	20.7	13	-F	3	C		29			ZX
40 HOLL	22	2219	2219	2252	S10	W03	.269	16379	22.7	33	-N	3	C		95			ZX
41 VORO	22	2349	2349	2351	N28	W30	.593	16373	20.7	2	-F		C	2349	45	.6	D	ZX
42 PURP	23	0026	0040	0047	N27	W31	.597	16373	20.7	21	?N		C					ZX
	IMP.1 NO : MITK																	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Millionths of Disk	CORR. AREA Sq. Deg.		
43 VORO	23	0132	0136	0150	S16	W28	.572	16377	21.0	18	?F		C	0136	179	2.2	DGH	ZX
	IMP.1 NO : MITK PURP																	
44 CULG	23	0259	0302	0340D	N22	E26	.503	16381	25.1	41D	?N		P	0302	220	2.4		ZX
	IMP.1 NO : PURP MITK																	
45 CULG	23	0318	0328U	0341D	N27	W39	.682	16373	20.2	23D	-F		P	0328	60	.8		ZX
46 CULG	23	0357	0401	0411	N29	W80	.981	16366	17.2	14	?F		C	0401	100			ZX
	IMP.1 NO : PURP MITK YUNN																	
GRP79047	23	0518E	0526	0527D	N26	W37	.656	16373	20.4	9	-N						J	
ABST	23	0518E	0526	0527D	N27	W36	.651	16373	20.5	9D	-N		P	0526	87	1.2	D	
ABST	23	0522E	0526	0527D	N26	W39	.677	16373	20.3	5D	-N		P	0526	87	1.3	DJ	
GRP79048	23	0558	0605	0610D	N27	W34	.629	16373	20.7	12	-N							
PURP	23	0558	0605	0656	N25	W34	.617	16373	20.7	58	1F		C					
YUNN	23	0559E	0559	0610	N30	W34	.649	16373	20.7	11D	-N		C		32	.4		
49 ABST	23	0729E	0732	0737D	N26	W41	.699	16373	20.2	8D	-N		P	0732	87	1.3	DJ	ZX
50 KHAR	23	0915E		0920D	S14	E44	.740	16384	26.7	5D	-F		V	0915			D	ZX
51 KHAR	23	0915E		0945D	S12	E02	.298	16379	23.5	30D	-F	*	P	0920			BE	ZX
52 KHAR	23	0930E		0938D	S18	E90	1.000	16388	30.1	8D	-F		P	0935			DH	ZX
GRP79053	23	1045>9	1045 1105	1110	N19	W54	.812	16368	19.4	25	-N							
CATA	23	1045	1045	1105	N20	W57	.841	16368	19.2	20	1N	2	C	1045	112	2.1		
CATA	23	1100	1105	1115D	N18	W51	.781	16368	19.6	15D	-N	2	P	1105	56	.9		
54 CATA	23	1245	1245	1250D	N10	E50	.763	16386	27.3	5D	-N	2	P	1245	56	.8		ZX
55 BIGB	23	1625	1627	1643D	S12	E03	.301	16379	23.9	18D	-N	1	P	1627	60	.6		ZX
	23	1643	1717	NO FLARE PATROL														
56 BIGB	23	1728	1730	1748	N26	W64	.902		18.9	20	-N	1	C	1730	60	1.4		ZX
57 HOLL	23	1818	1824	1918	N15	E44	.699	16386	27.1	60	-B	3	C		146		F	ZX
58 BIGB	23	1839	1843	1853	N28	W56	.845	16373	19.6	14	-N	1	C	1843	40	.7		ZX
59 BIGB	23	1851	1853	1907	N26	W44	.730	16373	20.5	16	-N	1	C	1853	60	.9		ZX
60 BIGB	23	1930	1931	1943	N26	W44	.730	16373	20.5	13	-N	1	C	1931	60	.9		ZX
61 HOLL	23	2026	2034	2127	S13	E45	.746	16384	27.2	61	-B	3	C		96		U F	ZX
GRP79062	23	2111	2116	2136	N17	E34	.578	16386	26.4	25	1N							
CULG	23	2111	2116	2138	N16	E35	.587	16386	26.5	27	1N		C	2116	160	2.0		
HOLL	23	2123E	2123U	2133	N18	E34	.582	16386	26.4	10D	-F	3	C		55			
63 HOLL	23	2141	2147	2154	S15	E44	.744	16384	27.2	13	-F	3	C		18			ZX
64 CULG	23	2155	2158	2203	S14	E79	.987	16388	29.8	8	-N		C	2158	40		G	ZX
65 HOLL	23	2201	2202	2218	S19	E44	.762	16384	27.2	17	-F	3	C		17			ZX
GRP79066	23	2221+1	2224	2234D	S17	E38	.690	16384	26.8	13	-N							
BIGB	23	2221	2224	2234	S19	E33	.650	16384	26.4	13	-N	2	C	2224	30	.4		
HOLL	23	2222	2236	2310	S15	E44	.744	16384	27.2	48	-N	3	C		25			
67 CULG	23	2345	2401	0012	S48	W08	.806		23.4	26	-F		C	2401	30	.5	G	ZX
68 PURP	24	0014	0019	0034	S12	W07	.318	16379	23.5	20	-F		C					ZX
69 PURP	24	0015	0019	0036	N27	W42	.714	16373	20.9	21	-F		P					ZX
70 PURP	24	0241	0252	0328	N10	E37	.601	16386	26.9	47	?N		C					ZX
	IMP.1 NO : YUNN																	
71 PURP	24	0350E		0350	S21	E41	.743	16384	27.2		-N		P					ZX

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
72 YUNN	24	0539	0541	0545	S21	E41	.743	16384	27.3	6	-N		C		64	1.0	ZX
GRP79073	24	0633+3	0638+2	0645	S21	E39	.723	16384	27.2	12	-N				90	1.3	E
PURP	24	0633	0640	0643	S21	E40	.733	16384	27.3	10	-F		C				
ATHN	24	0635	0638	0650	S18	E39	.706	16384	27.2	15	-N	1		0638	98	1.3	
YUNN	24	0636	0640	0645	S21	E38	.714	16384	27.1	9	-N		C		80	1.2	E
74 MONT	24	0752E	0754	0853	N14	W55	.817	16390	20.2	61D	-F		C	0754	60		E ZX
75 PURP	24	0802E	0802	0805	S21	E39	.723	16384	27.3	3D	-F		C				ZX
76 YUNN	24	0807	0810	0814	S20	E36	.687	16384	27.0	7	-N		C		80	1.1	E ZX
77 WEND	24	0845		0856	S18	E36	.674	16384	27.1	11	-F		V	0850	100	1.3	ZX
GRP79078	24	1019+1	1020+2	1038	S11	W11	.334	16379	23.6	19	-N						E
MONT	24	1019	1022	1035	S10	W11	.321	16379	23.6	16	-F		C	1022	60		E
CATA	24	1020	1020	1040	S12	W11	.342	16379	23.6	20	-B	2	C	1020	160	1.8	
79 MONT	24	1029	1035	1058	N25	W58	.856	16373	20.1	29	-N		C	1035	70		ZX
80 MONT	24	1106	1125	1143	S17	E39	.700	16384	27.4	37	-N		C	1125	100		E ZX
GRP79081	24	1145+6	1147+4	1205	N24	W58	.855	16373	20.1	20	-F				40	.8	
MONT	24	1145	1147	1152	N25	W58	.856	16373	20.1	7	-F		C	1147	50		
RAMY	24	1151	1151	1217	N24	W58	.855	16373	20.1	26	-F	3	C		33		
82 HUAN	24	1318		1321D	S18	E38	.695	16384	27.4	3D	-F	1	P	1320	35	.4	ZX
GRP79083	24	1349	1352	1357	S17	E36	.668	16384	27.3	8	-F				35	.5	
RAMY	24	1349	1352	1357	S17	E35	.657	16384	27.2	8	-F	3	C		40		
HUAN	24	1350E		1357	S18	E38	.695	16384	27.4	7D	-F	1	P	1354	30	.4	
84 HOLL	24	1456E	1459U	1521	N21	W58	.851	16373	20.3	25D	-F	2	C		15		ZX
85 HUAN	24	1458E		1505D	S15	E38	.678	16384	27.5	7D	-F	1	P				ZX
86 RAMY	24	1539	1541	1603	N12	W60	.863	16390	20.2	24	-F	3	C		20		ZX
87 HOLL	24	1545	1602	1716	N22	W58	.852	16373	20.3	91	?N	3	C		135		ZX
	IMP.1	%O	BIGB														
88 RAMY	24	1553	1553	1601	S29	W39	.774	16374	21.7	8	-F	3	C		21		ZX
GRP79089	24	1555+0	1556+1	1628	S16	E36	.662	16384	27.4	33	-N				80	1.1	FU
HOLL	24	1555	1557	1631	S17	E38	.690	16384	27.5	36	-N	2	C		70		U F
RAMY	24	1555	1556	1625	S16	E35	.651	16384	27.3	30	-B	3	C		85		
90 RAMY	24	1607	1621	1656	S29	W39	.774	16374	21.7	49	-N	3	C		46		ZX
91 PALE	24	1728	1728	1731	N24	W63	.893	16373	20.0	3	-F	3	C		27		ZX
92 HOLL	24	1739	1741	1748	S15	E34	.633	16384	27.3	9	-N	3	C		29		ZX
93 HOLL	24	1818	1818	1842	S17	E32	.624	16384	27.2	24	-F	3	C		24		F ZX
94 HOLL	24	1823	1824	1836	N25	W66	.914	16373	19.8	13	-F	3	C		29		ZX
GRP79095	24	1840>9	1842	1912	N25	W59	.864	16373	20.4	32	-F						FU
			1852														
HOLL	24	1840	1842	1924	N26	W55	.833	16373	20.7	44	-N	*	C		37		U
PALE	24	1851	1852	1859	N24	W64	.900	16373	20.0	8	-F	*	C		24		F
96 HOLL	24	1844	1857	1916	S17	E32	.624	16384	27.2	32	-F	3	C		23		ZX
97 BIGB	24	1851	1851	1904	S20	E60	.899	16388	29.3	13	-N	1			50	1.0	T ZX
GRP79098	24	1927+1	1931+1	1952	N24	W63	.893	16373	20.1	25	-N				50	1.2	FW
BIGB	24	1927	1931	1952	N24	W57	.888	16373	20.5	25	-N	1			50	.9	TW
HUAN	24	1928		1936D	N24	W63	.893	16373	20.1	8D	-N	1	P	1932	40		
PALE	24	1928	1932	1942D	N24	W63	.893	16373	20.1	14D	-F	3	C		60		F
99 HOLL	24	2051	2053	2108	N25	W68	.927	16373	19.8	17	-F	3	C		15		ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.		
GRP79100	24	2057+5	2110	2208	S18	E33	.642	16384	27.3	71	-N							
			2133+3															
HOLL	24	2057	2136	2208	S16	E33	.628	16384	27.3	71	-B	3	C		110		DE	
HOLL	24	2057	2136	2139	S16	E33	.628	16384	27.3	42	-B	3	C		110		DE	
CULG	24	2102	2110U	2141U	S18	E33	.642	16384	27.4	39D	-F		C	2110	120	1.6	T	
PALE	24	2119	2133U	2141D	S18	E32	.631	16384	27.3	22D	1N	3	C		253		FDE	
GRP79101	24	2139+3	2142+1	2148	N13	W62	.880	16390	20.3	9	-F				30	.6		
CULG	24	2139	2143	2148	N16	W63	.888	16390	20.2	9	-F		C	2143	40	.9		
HOLL	24	2142	2142	2148	N10	W62	.879	16390	20.3	6	-N	3	C		21			
102 PALE	24	2145E	2145U	2201D	S20	E51	.830		28.7	16D	-F	3	C		59		DE	ZX
GRP79103	24	2218	2221	2249	N41	E02	.586		25.1	31	-N						W	
BIGB	24	2218	2221	2249	N38	E05	.547		25.3	31	-N	1			33	.3		
BIGB	24	2219	2222	2234	N44	W01	.627		24.9	15	-N	1			33	.3	W	
104 HOLL	24	2221	2226	2234	S17	E26	.558	16384	26.9	13	-B	3	C		64		DE H	ZX
105 CULG	24	2240E	2244	2303	S15	E36	.656	16384	27.6	23D	?F		P	2244	30D	3.9	HT	ZX
	IMP.1	NO :	HOLL	BIGB	VORO													
106 HOLL	24	2242	2303	2333	N24	W65	.907	16373	20.1	51	-N	3	C		66		F	ZX
107 BIGB	24	2246	2250	2250D	S23	E58	.893	16388	29.3	4	-N	1			33	.6	T	ZX
108 HOLL	24	2311	2324	2334	S17	E29	.591	16384	27.1	23	-N	3	C		57			ZX
109 PURP	24	2334	2414	0017	S13	E36	.668		27.8	43	-F		C					ZX
110 PURP	24	2334	2415	0106	S29	W29	.696	16374	22.8	92	?F		C					ZX
	IMP.1	NO :	CULG	VORO														
111 CULG	25	0001	0007	0015	N12	E80	.982	16392	31.0	14	-F		C	0007	40			ZX
GRP79112	25	0011>9	0043+5	0111	S20	E28	.605	16384	27.1	60	2N						EHJ	
PURP	25	0011	0044	0111	S20	E30	.625	16384	27.3	60	2B	*	C		755	11.5		
CULG	25	0028	0048	0114	S21	E28	.614	16384	27.1	46	1N	*	C	0048	200	2.5	T	
VORO	25	0033	0043	0100	S20	E28	.605	16384	27.1	27	2F	*	C	0043	448	5.6	EHJ	
GRP79113	25	0118+5	0125	0214	S29	W46	.827	16374	21.6	56	2F				400	6.9	EHJK	
			0140+6															
CULG	25	0118	0140	0252U	S28	W47	.830	16374	21.5	94D	2F		C	0140	400	6.8	T	
VORO	25	0123	0125	0214	S30	W48	.846	16374	21.5	51	2F		C	0138	403	7.7	EHJK	
YUNN	25	0140	0146	0146D	S27	W45	.809	16374	21.7	6D	-F		C		64	1.1	E	
PURP	25	0145	015E	0211	S30	W44	.817	16374	21.8	26	2F		C		604	10.6		
114 CULG	25	0125	0143	0157	N12	E79	.979	16392	31.0	32	?F		C	0143	60			ZX
	IMP.1	NO :	PURP	VORO	YUNN	MITK												
GRP79115	25	0528+2	0533+3	0544	S30	W46	.832	16374	21.8	16	1F						E	
PURP	25	0528	0536	0538	S30	W46	.832	16374	21.8	10	1F		C					
CULG	25	0530	0533	0559	S28	W48	.837	16374	21.6	29	1F		C	0533	120	2.0		
TACH	25	0532E		0544	S30	W46	.832	16374	21.8	12D	2N		C	0532	291	5.2	E	
116 MONT	25	1025	1032	1040	S19	E26	.576	16384	27.4	15	-F		C	1032	50		E	ZX
117 RAMY	25	1230	1233	1242	S22	E24	.586	16384	27.3	12	-F	3	C		20			ZX
118 HOLL	25	1346E	1346U	1430	S19	E21	.526	16384	27.1	44D	-F	2	C		102			ZX
GRP79119	25	1434>9	1438	1511	S17	E21	.504	16384	27.2	37	-F				40	.5		
			1501+2															
RAMY	25	1434	1438	1455	S17	E21	.504	16384	27.2	21	-F	*	C		101			
HOLL	25	1449	1503	1516	S17	E21	.504	16384	27.2	27	-N	*	C		43			
RAMY	25	1457	1501	1505	S17	E21	.504	16384	27.2	8	-F	*	C		43			
GRP79120	25	1453+4	1458+0	1505	S28	W49	.845	16374	21.9	12	-F				20	.4		
HOLL	25	1453	1458	1506	S30	W50	.860	16374	21.9	13	-F	3	C		15			
RAMY	25	1457	1458	1503	S27	W48	.833	16374	22.0	6	-F	3	C		21			
121 RAMY	25	1521	1535	1606	S17	E21	.504	16384	27.2	45	?F	3	C		98			ZX
	IMP.1	NO :	HOLL	BIGB														
GRP79122	25	1631>9	1631	1729	S16	E20	.483	16384	27.2	58	-F						FU	
			1711															
HOLL	25	1631	1631	1735	S16	E20	.483	16384	27.2	64	-N	3	C		48		U F	
BIGB	25	1708	1711	1722	S16	E20	.483	16384	27.2	14	-F	2	C	1711	50	.5		

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR. AREA Sq. Deg.	
GRP79123	25	1739+6	1746+1	1757	S31	W54	.890	16374	21.7	18	-F				50	1.1	
HOLL	25	1739	1746	1758	S31	W54	.890	16374	21.7	19	-N	3	C		46		
RAMY	25	1740	1746	1803	S31	W54	.890	16374	21.7	23	-F	3	C		59		
HUAN	25	1745	1747	1755	S35	W55	.909	16374	21.6	10	-F	1	C	1747	45		
BIGB	25	1745	1746	1756	S29	W57	.902	16374	21.5	11	-N	2	C	1746	30	.6	
124 HOLL	25	1743	1803	1811	S16	E20	.483	16384	27.2	28	-F	3	C		30		ZX
125 HOLL	25	1804	1804	1813	N11	W76	.967	16390	20.1	9	-F	3	C				ZX
GRP79126	25	1846+1	1849+1	1902	N11	W78	.975	16390	19.9	16	-N				25		AD
HOLL	25	1846	1850	1901	N10	W76	.968	16390	20.1	15	-F	3	C				
BIGB	25	1847	1849	1902	N14	W79	.979	16390	19.9	15	-N	3	C	1849	30		A
HUAN	25	1849E		1855D	N11	W78	.975	16390	19.9	6D	-N	1	P	1849	20		D
GRP79127	25	1853+4	1901 1908+1	1925	S18	E18	.487	16384	27.1	32	-N						H
HOLL	25	1853	1909	1932	S18	E19	.496	16384	27.2	39	-B	*	C		161		DE H
PALE	25	1855	1908	1925D	S18	E18	.487	16384	27.1	30D	-N	*	C		35		FDE
BIGB	25	1857	1901	1918	S19	E19	.507	16384	27.2	21	-F	*	C	1901	100	1.1	
HUAN	25	1903E		1915D	S18	E18	.487	16384	27.1	12D	-F	*	P	1906	45	.5	E
GRP79128	25	1854+1	1857+0	1924	S31	W55	.896	16374	21.7	30	-N				40	.9	
HOLL	25	1854	1857	2053	S31	W55	.896	16374	21.7	119	-B	3	C		47		
BIGB	25	1855	1857	1924	S29	W57	.902	16374	21.5	29	-N	3	C	1857	40	.8	
PALE	25	1855	1857	1905	S31	W55	.896	16374	21.7	10	-N	3	C		20		DE
129 HOLL	25	1958	1958	2012	N15	E15	.305	16386	27.0	14	-F	3	C		55		ZX
GRP79130	25	2016	2022 2046+2	2101	S29	W57	.902	16374	21.6	45	-N				50	1.1	K
BIGB	25	2016	2022	2037	S29	W57	.902	16374	21.6	21	-N	*	C	2022	30	.6	
CULG	25	2024U	2048	2057	S28	W60	.917	16374	21.4	33D	1F	*	C	2048	100	2.3	KT
PALE	25	2030E	2043U	2043D	S31	W56	.902	16374	21.7	13D	-N	*	C		25		DE
BIGB	25	2044	2046	2104	S29	W57	.902	16374	21.6	20	-N	*	C	2046	50	.9	
GRP79131	25	2017	2025 2047+1	2124	S16	E17	.453	16384	27.1	67	1N				200	2.2	
HOLL	25	2017	2025	2033	S16	E17	.453	16384	27.1	16	-N	3	C		32		
PALE	25	2030E	2056U	2126	S18	E18	.487	16384	27.2	56D	-N	3	C		104		FDE
CULG	25	2040	2048	2122	S15	E15	.422	16384	27.0	42	1N		C	2048	200	2.3	T
HOLL	25	2041	2047	2128	S15	E17	.442	16384	27.1	47	1B	3	C		275		DE
BIGB	25	2044	2048	2116	S17	E17	.465	16384	27.1	32	-N	3	C	2048	90	1.0	
132 CULG	25	2040	2049	2058	N14	W79	.979	16390	19.9	18	-F		C	2049	40		ZX
133 BIGB	25	2254	2255	2259	S28	W55	.886	16374	21.8	5	-F	3	C	2255	30	.5	ZX
134 CULG	25	2304	2320	2341	N30	W71	.946	16373	20.6	37	-F		C	2320	50		ZX
GRP79135	25	2324+2	2326+1	2339	S19	E15	.473	16384	27.1	15	-N						
HOLL	25	2324	2326	2339	S20	E17	.502	16384	27.3	15	-B	3	C		75		DE
BIGB	25	2326	2327	2339	S19	E14	.465	16384	27.0	13	-N	2	C	2327	10	.1	
136 CULG	25	2335	2341	2351	S30	W60	.922	16374	21.5	16	-F		C	2341	60	1.4	ZX
137 CULG	25	2346	2358	0018	N15	W80	.982	16390	20.0	32	-F		C	2358	50		ZX
138 CULG	26	0037	0046	0113	S29	W61	.925	16374	21.5	36	?N		C	0046	140		ZX
	IMP.1 NO 1 YUNN PURP VORO																
GRP79139	26	0054+3	0108+3	0115D	S07	W42	.690	16379	22.9	21	-N						EL
CULG	26	0054	0111U	0148U	S08	W42	.693	16379	22.9	54D	1F		C	0111	250	3.5	L
YUNN	26	0057	0108	0115	S06	W42	.686	16379	22.9	18	-N		C		80	1.1	E
140 CULG	26	0103	0109	0129	N30	W71	.946	16373	20.7	26	-F		C	0109	40		ZX
141 CULG	26	0108	011E	0132	N26	W87	.996	16373	19.5	24	-F		C	011E	20		ZX
142 PURP	26	0109	0113	0120	S20	E15	.485	16384	27.2	11	-F		C				ZX
143 CULG	26	0245	0251	0314	N26	W87	.996	16373	19.6	29	-N		C	0251	30		K ZX
GRP79144	26	0252+3	0253+5	0302	S19	E14	.464	16384	27.2	10	-F						F
PALE	26	0252	0253	0302	S19	E14	.464	16384	27.2	10	-F	3	C		25		F
PURP	26	0255	0258	0258D	S20	E15	.485	16384	27.2	3D	-F		P				

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF	TYPE	TIME UT	MEAS. AREA Mill. of Disk	CORR AREA Sq. Deg.	
145 PURP	26	0312	0320	0330	S23	E16	.531	16384	27.3	18	-F		C				ZX
146 KANZ	26	0754	0756	0805	N27	W70	.939	16373	21.1	11	-B	1					ZX
GRP79147	26	0845+1	0845+4	0854	N28	W80	.981	16373	20.4	9	-N						A
KANZ	26	0845E	0845	0853	N26	W86	.995	16373	19.9	8D	-B	1					A
YUNN	26	0846	0849	0855	N30	W74	.960	16373	20.8	9	-F		C		16		A
148 KANZ	26	0939E	0939	0943	S19	E10	.437	16384	27.2	4D	-F	1					ZX
149 KANZ	26	1014E	1014	1022	S16	E07	.376	16384	27.0	8D	-F	1					ZX
GRP79150	26	1111	1115+5	1126	S19	E09	.432	16384	27.1	15	-N				150	1.7	EL
KANZ	26	1111	1115	1123	S19	E09	.432	16384	27.1	12	-B	1					
CATA	26	1115E	1120	1120D	S19	E10	.437	16384	27.2	5D	-N	2	P	1120	140	1.6	
ABST	26	1120E	1120	1128	S18	E08	.411	16384	27.1	8D	-N		P	1120	174	1.9	EL
151 ABST	26	1120E	1123	1128	N13	W89	.999	16390	19.8	8D	?N		P	1123	87		AD ZX
	IMP.1 NO : MONT KANZ																
152 ABST	26	1136	1138	1142D	N24	W80	.981	16373	20.5	6D	?N		P	1138	87		D ZX
	IMP.1 NO : MONT KANZ																
153 LVOV	26	1211	1216	1230	S18	E10	.423	16384	27.3	19	1N		C	1216	200	2.3	E ZX
154 RAMY	26	1403	1404	1410	N26	W67	.922	16373	21.6	7	-F	3	C		35		ZX
155 RAMY	26	1414	1415	1428	S17	E11	.415	16384	27.4	14	-F	3	C		40		ZX
GRP79156	26	1438+2	1440 1448	1459	N25	W74	.958	16373	21.1	21	-F						
RAMY	26	1438	1440	1500	N26	W72	.949	16373	21.2	22	-F	3	C		29		
HOLL	26	1440	1448	1458	N24	W76	.967	16373	20.9	18	-F	3	C				
157 RAMY	26	1501	1502	1513	S17	E10	.408	16384	27.4	12	-N	3	C		71		ZX
158 BIGB	26	1629	1630	1634	S19	E08	.426	16384	27.3	5	-N	2	C	1630	40	.4	ZX
159 BIGB	26	1722	1723	1732	S19	E05	.414	16384	27.1	10	-N	2	C	1723	40	.4	ZX
GRP79160	26	1817>9	1930 1950+9	2019	S18	E05	.399	16384	27.1	122	-B						U
HOLL	26	1817	1959	2021	S18	E05	.399	16384	27.1	124	1B	3	C		214		UDE
BIGB	26	1928	1930	1946	S19	E04	.412	16384	27.1	18	-N	2	C	1930	30	.3	
BIGB	26	1949	1950	2017	S19	E05	.414	16384	27.2	28	-N	2	C	1950	40	.4	
161 BIGB	26	1933	1935	1940	S30	W70	.968	16374	21.6	7	-F	2	C	1935	20		ZX
162 HOLL	26	2001	2003	2018	S21	W31	.643	16379	24.5	17	-F	3	C		23		ZX
163 BIGB	26	2029	2032	2035	S30	W70	.968	16374	21.6	6	-F	2	C	2032	30		ZX
164 BIGB	26	2056	2059	2109	S30	W70	.968	16374	21.6	13	-N	2	C	2059	30		ZX
165 MANI	26	2317E	2317U	2328D	S19	E03	.409	16384	27.2	11D	-F	3	C		20		ZX
GRP79166	26	2325+6	2332 2341	2348	S29	W72	.974	16374	21.6	23	-F						
CULG	26	2325	2341	2354	S29	W74	.988	16374	21.4	29	-F		C	2341	60		
BIGB	26	2331	2332	2341	S30	W70	.968	16374	21.7	10	-F	2	C	2332	40		
GRP79167	27	0019>9	0105+2	0136	S19	E02	.406	16384	27.2	77	-N						
PURP	27	0019	0105	0145	S19	E01	.405	16384	27.1	86	1N		P				
CULG	27	0053	0107	0126	S19	E03	.408	16384	27.3	33	-F		C	0107	120	1.3	
168 CULG	27	0020	0030	0042	S30	W78	.991	16374	21.2	22	-F		C	0030	60		ZX
169 CULG	27	0122	0137	0224	S32	W71	.973	16374	21.7	62	?F		C	0137	120		FK ZX
	IMP.1 NO : MITK PURP																
170 CULG	27	0245E	0250U	0309	S10	W65	.917	16379	22.2	24D	-F		P	0250	80	1.5	L ZX
171 CULG	27	0350	0402	0411	S32	W72	.976	16374	21.8	21	?F		C	0402	180		L ZX
	IMP.1 NO : PURP YUNN																
172 PURP	27	0400	0402	0405	S19	W01	.405	16384	27.1	5	-F		C				ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq Deg.		
173 PURP	27	0448	0452	0459	S30	W72	.975	16374	21.8	11	-F		P					ZX
174 PURP	27	0603	0607	0616	S19	W02	.406	16384	27.1	13	-F		C					ZX
	27	0900	1034	NO FLARE PATROL														
	27	1047	1151	NO FLARE PATROL														
	27	1209	1219	NO FLARE PATROL														
	27	1231	1247	NO FLARE PATROL														
	27	1501	1510	NO FLARE PATROL														
175 BIGB	27	1704	1725	1945	S22	E35	.689	16388	30.3	161	-N	2	C	1725	110	1.3	G	ZX
176 BIGB	27	1727	1728	1735	N20	E70	.937	16398	2.0	8	-N	1	C	1728	30			ZX
GRP79177	27	1754+1	1755	1759	N17	E78	.975	16398	3.6	5	-F						E	
BIGB	27	1754	1755	1758	N17	E78	.975	16398	2.6	4	-N	1	C	1755	40			
HUAN	27	1755		1759	N18	E78	.975	16398	2.6	4	-F	1	C				E	
178 HUAN	27	1810		1814	N28	E90	.999	16399	3.5	4	-F	1	C	1812	20		D	ZX
GRP79179	27	1920>9	1940+3	1949	N16	E74	.958	16398	3.4	29	-N				50			
PALE	27	1920	1943	1952	N17	E72	.948	16398	2.2	32	-N	3	C		70			
BIGB	27	1937	1940	1946	N15	E76	.967	16398	2.5	9	-B	2	C	1940	40			
GRP79180	27	2106+7	2114+0	2120	N17	E75	.962	16398	3.5	14	-N							
HOLL	27	2106	2114	2122	N20	E74	.958	16398	2.4	16	-N	3	C					
BIGB	27	2113	2114	2117	N15	E76	.967	16398	2.6	4	-N	2	C	2114	20			
181 CULG	28	0027	0035	0054	S20	W17	.498	16384	26.7	27	-F		C	0035	10	.1		ZX
182 CULG	28	0501	0510	0521	N13	E70	.936	16398	2.5	20	?F		C	0510	80			ZX
	IMP.1	NO	PURP	YUNN														
183 CULG	28	0647	0651	0707	S20	W20	.525	16384	26.8	20	-N		C	0651	80	1.0		ZX
184 CULG	28	0725	0730	0743	S20	W20	.525	16384	26.8	17	-F		C	0730	60	.7		ZX
185 CULG	28	0741	0743	0749D	N13	E66	.910	16398	2.3	80	-N		C	0743	40		T	ZX
	28	0905	1221	NO FLARE PATROL														
	28	1227	1232	NO FLARE PATROL														
186 BIGB	28	1749	1750	1755	N17	E64	.897	16398	2.5	6	-N	2	C	1750	30	.7		ZX
GRP79187	28	1923	1957 2009	2032D	N14	W12	.259	16394	27.9	69	-F						D	
HOLL	28	1923	2009	2225	N14	W12	.259	16394	27.9	182	-F	3	C		54			
HUAN	28	1934E		1952D	N14	W12	.259	16394	27.9	180	-F	1	P	1945	20	.2	D	
BIGB	28	1956	1957	2032	N14	W11	.246	16394	28.0	36	-F	2	C	1957	30	.3		
188 CULG	28	2024	2033	2054	S14	W30	.576	16384	26.6	30	-N		C	2033	120	1.4	KTH	ZX
189 CULG	28	2134	2140	2155	S16	W32	.614	16384	26.5	21	-N		C	2140	50	.6	H	ZX
190 BIGB	28	2151	2152	2201	S12	W74	.968	16379	23.4	10	-F	2	C	2152	30			ZX
191 CULG	28	2230	2236	2243	S16	W32	.614	16384	26.5	13	-F		C	2236	60	.8	HT	ZX
192 CULG	28	2251	2252	2255	S26	W40	.760		26.0	4	-N		C	2252	20	.2	G	ZX
193 BIGB	28	2303	2304	2322	N11	E90	1.000	16402	4.7	19	-N	2	C	2304	30			ZX
GRP79194	29	0000+7	0006+4	0044	N12	E26	.450	16392	30.9	44	-F						EGJ	
VORO	29	0000	0006	0047	N14	E27	.472	16392	31.0	47	-F		C	0006	161	1.8	EJ	
PURP	29	0007	0010	0040	N11	E26	.446	16392	31.0	33	-N		P				G	
GRP79195	29	0028+3	0032+1	0047	N16	W30	.523	16386	26.8	19	-N						EJ	
PURP	29	0013	0115	0117	N18	W32	.559	16386	26.6	64	-N		P					
PURP	29	0028	0032	0045	N16	W27	.482	16386	27.0	17	1N		C					
VORO	29	0031	0033	0047	N15	W30	.519	16386	26.8	16	-F		C	0033	134	1.5	EJ	
GRP79196	29	0037+8	0045+1	0050	S16	W30	.590	16384	26.8	13	-N				120	1.5	DH	
CULG	29	0037	0046	0059	S16	W34	.636	16384	26.5	22	-N		C	0046	140	1.8	HT	
PURP	29	0045E	0045	0048	S16	W30	.590	16384	26.8	30	-F		C					
VORO	29	0045	0046	0050	S15	W24	.513	16384	27.2	5	-N		C	0046	108	1.3	DH	

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS. AREA Millionths of Disk	CORR. AREA Sq. Deg.		
GRP79197	29	0048+8	0057+1	0104	N19	E54	.814	16398	3.1	16	-N				90	1.6	HU	
CULG	29	0048	0058	0111	N19	E53	.805	16398	2.8	23	-N		C	0058	100	1.7		
VORO	29	0056	0057	0100	N20	E53	.806	16398	2.8	4	-N		C	0057	90	1.5	DH	
PALE	29	0058E	0058U	0104D	N19	E56	.833	16398	2.2	60	1F	3	C		211		U	
PURP	29	0059E	0059	0101	N18	E54	.813	16398	2.1	20	-N		C					
MANI	29	0101E	0101U	0107	N18	E56	.832	16398	2.2	60	-F	3	C		50		F	
GRP79198	29	0112+1	0115+0	0118	S16	W29	.579	16384	26.9	6	-F				110	1.3	DH	
YUNN	29	0112	0115	0117	S17	W34	.643	16384	26.5	5	-N		C		125	1.6		
VORO	29	0113	0115	0118	S15	W24	.513	16384	27.3	5	-F		C	0115	90	1.1	DH	
GRP79199	29	0156+6	0202+4	0214	S15	W31	.595	16384	26.8	18	-N				120	1.5	EHK	
PURP	29	0156	0203	0210	S16	W31	.602	16384	26.8	14	-N		C					
CULG	29	0200	0204	0230	S16	W34	.636	16384	26.5	30	-N		C	0204	140	1.8	HT	
VORO	29	0201	0202	0214	S15	W24	.513	16384	27.3	13	-N		C	0202	116	1.5	EK	
YUNN	29	0202	0206	0206D	S13	W32	.593	16384	26.7	4D	-N		C		96	1.2		
200 CULG	29	0404	0423	0508	S20	E43	.754	16397	1.4	64	?F		C	0423	180	2.7		ZX
	IMP.1 NO 1 PURP																	
201 CULG	29	0515	0528	0543	S17	W36	.665	16384	26.5	28	-N		C	0528	80	1.0	H	ZX
	29	1010	1023	NO FLARE PATROL														
	29	1030	1111	NO FLARE PATROL														
	29	1114	1126	NO FLARE PATROL														
202 CATA	29	1125E	1125	1125D	N14	E58	.847	16398	2.8		2N	2	P	1125	449	8.7		ZX
203 RAMY	29	1208	1209	1219	S16	W36	.659	16384	26.8	11	-B	3	C		158		FDE	ZX
204 KANZ	29	1415		1435	N14	W21	.386	16394	28.0	20	-F	1						ZX
205 HOLL	29	1505	1508	1522	N33	E70	.944	16399	3.9	17	-F	2	C		40			ZX
GRP79206	29	1521+2	1522+2	1530	S20	W40	.724	16384	26.6	9	-F				30	.4		
HOLL	29	1521	1522	1531	S22	W40	.736	16384	26.6	10	-F	3	C		27			
HUAN	29	1523	1524	1529	S19	W41	.729	16384	26.6	6	-F	1	C	1524	30	.4		
207 BIGB	29	1828	1832	1844	N12	E78	.976	16402	4.6	16	-N	1	C	1832	30			ZX
208 HUAN	29	1859	1901	1904	S12	E88	1.000	16401	5.4	5	-F	1	C	1901	15		D	ZX
GRP79209	29	1931+4	1936+1	1942	N29	E68	.931	16399	4.9	11	-N				30		DG	
BIGB	29	1931	1937	1945	N28	E68	.930	16399	3.9	14	-N	1	C	1937	60		G	
HOLL	29	1932	1936	1942	N29	E66	.919	16399	3.8	10	-N	2	C		31			
HUAN	29	1935	1937	1940	N29	E70	.941	16399	4.1	5	-F	1	C	1937	15		D	
GRP79210	29	1939+1	1941+2	2010	S16	E74	.970	16401	5.4	31	-B						F	
HOLL	29	1939	1943	1954	S16	E78	.984	16401	4.7	15	-B	2	C				F	
BIGB	29	1939	1941	2017	S16	E74	.970	16401	4.4	38	-B	1	C	1941	100			
HUAN	29	1940	1943	2010	S15	E72	.961	16401	4.2	30	-N	2	C	1943	140			
211 HUAN	29	1950	1951	1954	S19	W43	.749	16384	26.6	4	-F	1	C	1951	30	.4		ZX
212 CULG	29	2017E	2017E	2111	S30	W40	.784	16385	26.8	540	?F		P	2017	160	2.2	B	ZX
	IMP.1 NO 1 BIGB HUAN																	
213 CULG	29	2108	2117	2123D	N29	E69	.936	16399	4.1	150	-N		C	2117	70			ZX
214 CULG	29	2145	2210	2226	S30	W42	.800	16385	26.8	40	-F		C	2210	120	1.9	FKL	ZX
215 CULG	29	2304	2308	2315	S17	W46	.770	16384	26.5	11	-N		C	2308	40	.6		ZX
216 CULG	29	2304	2310	2321	S09	E67	.928	16401	4.0	17	-F		C	2310	10	.1		ZX
217 CULG	29	2343	2354	0011	N18	E46	.730	16398	2.4	28	-N		C	2354	90	1.4		ZX
GRP79218	30	0116+9	0127+6	0151	N19	E44	.710	16398	3.4	35	-N				110	1.6	FHJK	
CULG	30	0116	0127	0209	N18	E44	.708	16398	2.4	53	1N	*	C	0127	140	2.0	FK	
YUNN	30	0125	0133	0148	N18	E44	.708	16398	2.4	23	-N	*	C		48	.7		
MANI	30	0127E	0128	0151D	N20	E44	.713	16398	2.4	24D	-N	*	C		100		F	
VORO	30	0129E		0151	N20	E43	.702	16398	2.3	22D	-N	*	P	0130	116	1.6	EHJ	
219 CULG	30	0119	0124	0134	N07	E69	.931	16402	4.2	15	-F		C	0124	20	.4		ZX
220 CULG	30	0123	0129	0143	N26	E60	.876	16399	3.6	20	-F		C	0129	40	.8		ZX

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OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX LONG. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		COND	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq Deg		
GRP79221	30	0154	0156	0204	N20	E44	.713	16398	3.4	10	-N						DJ	
VORO	30	0154	0156	0204	N20	E44	.713	16398	2.4	10	-N	*	C	0156	72	1.0	DJ	
MANI	30	0200E	0200U	0203D	N20	F45	.724	16398	2.5	30	-F	*	C		20			
222 CULG	30	0214	0218	0229	N25	E71	.945		4.4	15	-F		C	0218	60			ZX
223 CULG	30	0245	0249	0303	S22	W38	.716	16384	27.3	18	-F		C	0249	50	.7		ZX
224 CULG	30	0353	0355	0359	N23	E50	.784	16398	2.9	6	-N		C	0355	30	.4		ZX
225 CULG	30	0434	0443	0453	S12	W49	.782	16384	26.5	19	-F		C	0443	40	.6		ZX
226 CULG	30	0503	0522	0552	S18	W47	.783	16384	26.7	49	-F		C	0522	60	1.0		ZX
227 CULG	30	0529	0533	0633	N13	E58	.766	16398	3.0	64	?N		C	0533	180	2.7	FL	ZX
	IMP.1 NO : YUNN PURP																	
228 CULG	30	0544	0557	0617	N33	E65	.918	16399	4.1	33	?F		C	0557	220	4.7		ZX
	IMP.1 NO : YUNN PURP																	
229 CULG	30	0554	0557	0607	S17	W53	.835	16384	26.3	13	-F		C	0557	60	1.0		ZX
230 CULG	30	0607	0620	0649	S15	W78	.984	16379	24.4	42	-F		C	0620	40			ZX
GRP79231	30	0701+4	0708+1	0718	N28	E56	.848	16399	4.5	17	-N				35	.7		
CULG	30	0701	0708	0721	N29	E57	.858	16399	3.6	20	-N		C	0708	40	.8		
YUNN	30	0705	0709	0715	N27	E56	.846	16399	3.5	10	-N		C		32	.6		
232 YUNN	30	0715	0725	0727	N16	E39	.642	16398	2.2	12	-N		C		48	.6		ZX
233 CULG	30	0731	0734	0742	N23	E47	.754	16398	2.8	11	-N		C	0734	100	1.5		ZX
234 CULG	30	0758	0806D	0806D	N18	E43	.696	16398	2.6	80	-N		P	0806	80	1.1		ZX
	30	0930	0940	NO FLARE PATROL														
	30	1000	1050	NO FLARE PATROL														
	30	1055	1126	NO FLARE PATROL														
	30	1150	1157	NO FLARE PATROL														
	30	1308	1326	NO FLARE PATROL														
235 HUAN	30	1358E		1402	N17	E30	.528	16398	1.8	40	-F	1	P				E	ZX
GRP79236	30	1629>9	1643+1 1729	1733	N33	E57	.867	16399	5.0	64	-F						D	
BIGB	30	1629	1644	1737	N33	E59	.880	16399	4.1	68	-N	1	C	1644	70	1.4		
RAMY	30	1642	1643	1702	N33	E57	.867	16399	4.0	20	-F	3	C		132			
HUAN	30	1727	1729	1733	N28	E50	.797	16399	3.5	6	-F	1	C	1729	20	.3	D	
237 BIGB	30	1809	1811	1822	N17	E38	.632	16398	2.6	13	-F	2	C	1811	40	.5		ZX
238 BIGB	30	2129	2134U	2147	S07	E25	.462		1.8	18	-F	1			37	.4		ZX
GRP79239	30	2203>9	2217 2250	2257	N17	E28	.502	16398	3.0	54	-N						F	
HOLL	30	2203	2217	2256	N19	E31	.552	16398	2.2	53	-N	2	C		105		F	
CULG	30	2242	2250	2258	N16	E25	.455	16398	1.8	16	-N		C	2250	30	.3		
240 BIGB	30	2248	2250	2302	S07	E23	.434		1.7	14	-F	1			50	.5		ZX
241 BIGB	30	2355	2357	0005D	S01	E26	.447		1.9	100	-F	1			33	.3		ZX
242 PURP	31	0006	0008	0012	N15	W54	.810	16386	27.0	6	-F		C					ZX
GRP79243	31	0155+8	0207+3 0225	0226	N12	E57	.837	16402	5.4	30	1F						J	
CULG	31	0156	0225	0232D	N17	E57	.840	16402	4.4	360	1F		C	0225	180	3.4	F	
PURP	31	0204	0210	0226	N10	E59	.855	16402	4.5	22	1N		C					
VORO	31	0204	0207	0220	N12	E55	.818	16402	4.2	16	-F		C	0207	90	1.6	DJ	
244 PURP	31	0232	0235	0244	N16	E34	.578	16398	2.7	12	-F		C					ZX
GRP79245	31	0328+7	0335+0 0346	0357	N10	E58	.846	16402	5.5	29	1N							
CULG	31	0328	0335	0419	N10	E58	.846	16402	4.5	51	1N		C	0335	180	3.4		
YUNN	31	0330	0335	0342	N09	E58	.845	16402	4.5	12	-F		C		16	.3		
PURP	31	0335	0346	0357	N10	E58	.846	16402	4.5	22	1B		C					

Hα SOLAR FLARES

OCTOBER 1979

OBSERV-ATORY	OBSERVED UT				LOCATION					DURA-TION	IMPOR-TANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST.	CENTRAL DISTANCE	HALE PLAGE REGION	CMP. DAY	MIN.		CONF.	TYPE	TIME UT	MEAS AREA Mill of Disk	CORR AREA Sq. Deg.	
246 CULG	31	0417	0424	0434	N28	E44	.742	16399	3.5	17	-F		C	0424	80	1.2	ZX
247 CULG	31	0427	0436	0438D	S18	E53	.838	16401	4.2	11D	-N		P	0436	80	1.4	ZX
GRP79248	31	0520+6	0521	0527D	N17	E28	.502	16398	3.3	7	1N						
YUNN	31	0520	0521	0527	N16	E28	.497	16398	2.3	7	1B		C		257	3.8	
PURP	31	0526	0540	0623	N18	E29	.521	16398	2.4	57	1N		C				
GRP79249	31	0521E	0521	0532	N16	W57	.839	16386	26.9	11	-F						
YUNN	31	0521E	0521	0532	N17	W57	.840	16386	26.9	11D	-F		C		48	.9	
PURP	31	0526E	0526	0531	N15	W57	.839	16386	27.0	5D	-F		C				
250 PURP	31	0544	0623	0630	N10	E57	.836	16402	4.5	46	-F		C				ZX
251 CULG	31	0626	0628	0646	N07	E87	.998		6.8	20	?N		C	0628	80		ZX
	IMP.1 NO 1 PURP YUNN																
252 CULG	31	0630	0632	0644	N19	W60	.868	16386	26.8	14	-N		C	0632	70	1.4	ZX
GRP79253	31	0727>9	0735 0742	0801	N15	E28	.492	16398	3.4	34	-F						
CULG	31	0727	0735	0757	N14	E27	.473	16398	2.3	30	-F		C	0735	20	.2	
PURP	31	0740	0742	0805	N16	E30	.524	16398	2.6	25	-F		P				
	31	0905	0920	NO FLARE PATROL													
	31	0930	0940	NO FLARE PATROL													
254 CATA	31	1045	1045	1055D	N18	E26	.482	16398	2.4	10D	1B	2	P	1045	337	3.9	ZX
	31	1055	1103	NO FLARE PATROL													
GRP79255	31	1103E	1103	1155D	N17	E26	.475	16398	3.4	52	1N						
MONT	31	1103E	1103	1128D	N18	E28	.508	16398	2.6	25D	-N		C	1103	220		B
WEND	31	1115E		1155D	N17	E25	.462	16398	2.3	40D	2N		V	1124	510	6.1	
	31	1200	1432	NO FLARE PATROL													
256 HOLL	31	1434	1436	1442	N16	E25	.456	16398	2.5	8	-N	3	C		23		ZX
GRP79257	31	1439+1	1443	1459	S15	E46	.761	16401	5.1	20	-F				40	.6	E
HOLL	31	1439	1443	1501	S15	E47	.771	16401	4.1	22	-F	3	C		39		
HUAN	31	1440		1457	S15	E46	.761	16401	4.1	17	-F	1	C	1442	40	.6	E
	31	1541	1544	NO FLARE PATROL													
GRP79258	31	1628+8	1629+8	1635	N13	W64	.896	16386	26.9	7	-F				30	.7	
HOLL	31	1628	1629	1634	N13	W63	.889	16386	27.0	6	-N	3	C		35		F
HUAN	31	1628	1629	1635	N13	W66	.911	16386	26.7	7	-F	1	C	1629	20		D
	31	1727	1809	NO FLARE PATROL													
GRP79259	31	2005		2027	S16	E57	.866	16401	6.1	22	-N						D
HUAN	31	2005		2021	S15	E56	.855	16401	5.0	16	-N	1	C	2017	20	.3	D
CULG	31	2017E	2017U	2032	S17	E58	.876	16401	5.2	150	-N		P	2017	60	1.1	
260 HUAN	31	2023		2038	S09	E39	.658	16401	3.8	7	-F	1	C				E ZX
GRP79261	31	2122+2	2125+1	2135	N16	W70	.937	16386	26.6	13	-N				60		
CULG	31	2122	2126	2138	N17	W70	.937	16386	26.6	16	1N		C	2126	80		
BIGB	31	2124	2125	2131	N15	W70	.937	16386	26.6	7	-N	3	C	2125	50		
GRP79262	31	2123+1	2125+1	2144	S16	E55	.849	16401	6.0	21	-N				80	1.5	
CULG	31	2123	2126	2145	S16	E56	.858	16401	5.1	22	-N		C	2126	100	1.9	
BIGB	31	2124	2125	2142	S16	E55	.849	16401	5.0	18	-B	3	C	2125	60	1.1	
263 CULG	31	2124	2142	2203	N26	E71	.945	16405	6.2	39	-F		C	2142	40		ZX
264 CULG	31	2126	2137	2208	S19	E07	.415	16397	1.4	42	-F		C	2137	120	1.3	F ZX
265 CULG	31	2308	2313	2321	S15	E53	.829	16401	4.9	13	?N		C	2313	120	2.1	ZX
	IMP.1 NO 1 HOLL BIGB																

Hα SOLAR FLARES

OCTOBER 1979

OBSERV-ATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS			REMARKS
	DATE	START	MAX. PHASE	END	APPROX LAT.	APPROX MER. DIST	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP. DAY	MIN.		CONF	TYPE	TIME UT	MEAS. AREA Mill of Disk	CORR AREA Sq Deg	

"REMARKS":

A = Eruptive prominence whose base is less than 90 degrees from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by high-speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the H and K lines of CaII.
P = Flare shows helium D3 in emission.
Q = Flare shows Balmer continuum in emission.
R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
S = Brightness follows disappearance of filament in same position.
T = Region active all day.
U = Two bright branches, parallel or converging.
V = Occurrence of an explosive phase: important, expansion within roughly 1 minute that often includes a significant intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H-alpha line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

DAILY FLARE INDICES
Includes all Flares

OCTOBER 1979

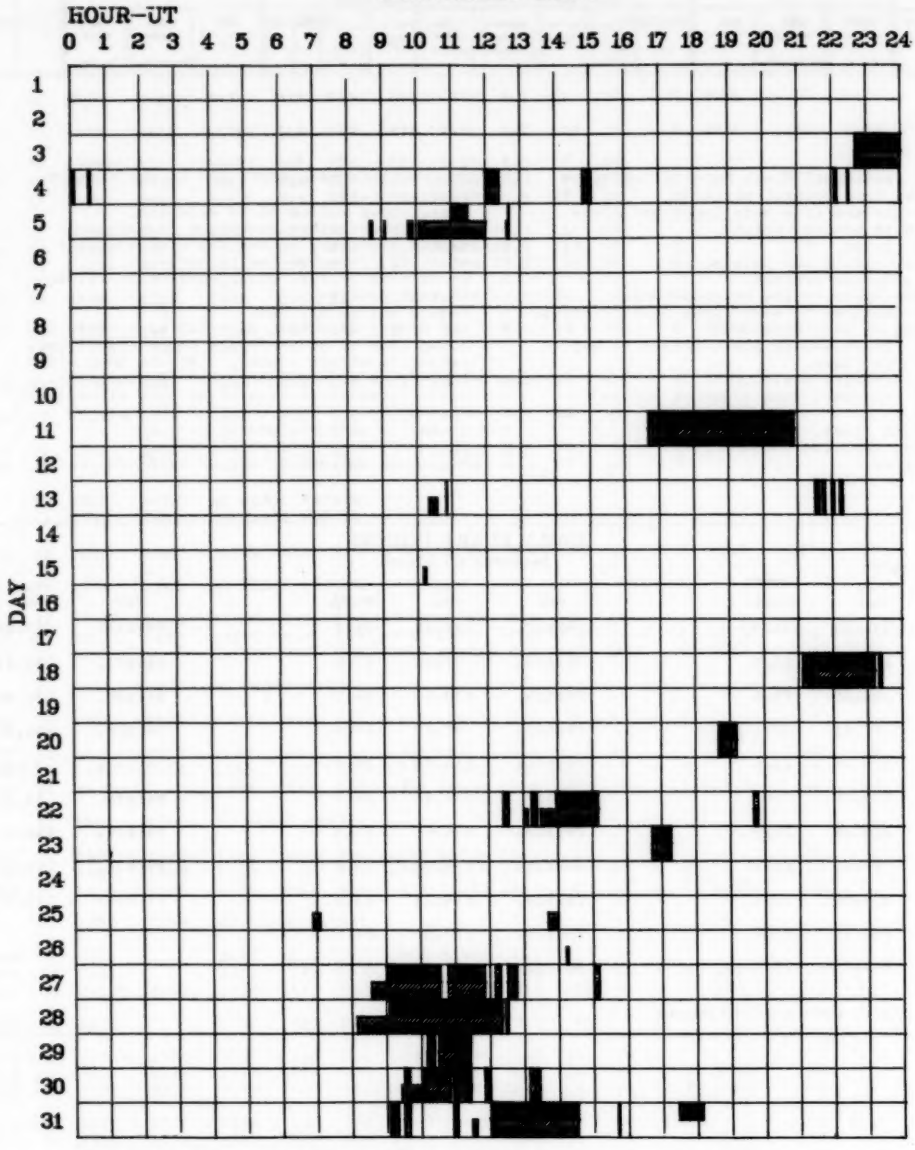
Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.	Date	Flare Index	HR. OBS.
791001.	134.21	24.0	791012.	195.01	24.0	791023.	62.46	23.4
791002.	251.59	24.0	791013.	67.03	23.6	791024.	80.18	24.0
791003.	96.65	22.6	791014.	138.61	24.0	791025.	436.85	24.0
791004.	67.46	23.1	791015.	87.22	24.0	791026.	104.34	24.0
791005.	125.52	23.5	791016.	166.69	24.0	791027.	25.26	20.8
791006.	339.70	24.0	791017.	337.51	24.0	791028.	33.80	20.7
791007.	310.08	24.0	791018.	135.87	21.9	791029.	196.25	22.9
791008.	97.27	24.0	791019.	742.02	24.0	791030.	54.47	22.1
791009.	125.57	24.0	791020.	1004.23	23.5	791031.	144.47	20.2
791010.	106.72	24.0	791021.	177.23	24.0			
791011.	218.25	19.8	791022.	78.27	22.3			

When no Flare Index is given, it is 0 for that day.

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

OCTOBER 1979



Observatories included in total patrol:

Abastumani	Catania	Istanbul	Locarno	Ramey
Athens	Culgoora	Kandilli	Lvov	Tashkent
Bern	Haute Provence	Kharkov	Manila	Tel Aviv
Big Bear	Holloman	Kanzelhoehe	Monte Mario	Voroshilov
Bucharest	Huancayo	Kodaikanal	Palehua	Wendelstein
			Purple Mt.	Yunnan

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

SGD 439 Part II (Comprehensive)

MISCELLANEOUS DATA

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ACTIVE REGIONS
CARRINGTON ROTATION 1697
(July 5 to August 1, 1980)

Region No.	Coordinates Lat.	Long.	IMP	Age at CMP	Spot-less Region	Region No. in Rotation 1696	Activity at West Limb
1	19°S	355	1	>6	x		dispersed
2	30 S	352	1	>6	x		decreasing
3	15 S	350	1	>6	x	2-4	decreasing
4	5 S	336	1	>6	x		dispersed
5	10 S	332	1	>6	x		disappeared
6	15 N	326	1	>6	x	11	dispersed
7	13 S	304	1	-2	x		decreasing
8	21 N	295	2	+6			dispersed
9	22 N	292	1	>6	x		dispersed
10	8 S	290	1	+5	x		decreasing
11	21 N	283	2	>6			decreasing
12	8 S	279	1	>6	x		dispersed
13	14 S	277	3	>6		18	decreasing
14	18 N	276	4	>6			decreasing
15	5 S	265	2	+3	x		decreasing
16	15 S	255	1	+3	x		disappeared
17	19 N	230	4	>6			decreasing
18	20 N	212	1	>6	x	28-29	decreasing
19	14 S	207	6	>6			decreasing
20	25 S	205	2	+1			decreasing
21	26 S	198	2	-2			decreasing
22	16 S	194	1	>6	x	33	decreasing
23	12 S	187	2	>6			decreasing
24	6 N	186	2	-1			decreasing
25	27 S	174	2	0			decreasing
26	14 N	172	1	>6	x		decreasing
27	18 N	172	4	>6			decreasing
28	31 S	161	4	>6		36	decreasing
29	4 N	160	2	>6			dispersed
30	10 S	159	2	-2			decreasing
31	14 N	155	3	>6			decreasing
32	19 S	152	4	>6			decreasing
33	26 N	149	2	+4			decreasing
34	29 S	149	1	>6	x		decreasing
35	22 N	146	1	+4	x		dispersed
36	15 N	142	2	-5			?
37	16 N	134	2	>6			decreasing
38	9 S	132	1	>6	x	44	decreasing
39	27 S	131	1	>6	x	42	decreasing
40	16 S	129	1	>6	x		dispersed
41	14 S	119	3	>6			decreasing
42	21 S	113	3	>6			decreasing
43	11 S	99	1	>6	x	51	dispersed
44	11 N	99	3	>6			decreasing
45	35 S	91	2	+4			decreasing
46	35 S	73	1	+4	x		dispersed
47	16 N	65	1	+4	x		dispersed
48	35 S	58	1	>6	x		dispersed
49	19 N	57	2	>6			decreasing
50	9 S	41	4	>6			decreasing
51	10 N	38	1	>6	x		dispersed
52	27 N	36	1	>6	x		dispersed
53	16 S	34	1	>6	x		decreasing
54	17 N	25	2	>6			decreasing
55	12 S	21	1	>6	x	65	dispersed
56	27 N	21	2	>6		53	decreasing
57	10 N	20	2	-3			stable
58	9 N	15	1	+3	x		dispersed
59	10 N	7	1	-2	x		dispersed
60	38 S	3	2	+4			decreasing
61	33 S	1	1	>6	x		dispersed

ACTIVE REGIONS
CARRINGTON ROTATION 1698
(August 1 to August 29, 1980)

Region No.	Coordinates Lat.	Coordinates Long.	IMP	Age at CMP	Spot-less Region	Region No. in Rotation 1697	Activity at West Limb
1	19°N	340°	2	+6			decreasing
2	31 S	333	1	+5	X		dispersed
3	8 N	311	1	+4	X		dispersed
4	20 S	311	2	+4			decreasing
5	11 S	305	2	-3			stable
6	7 S	303	2	+6			dispersed
7	15 N	296	1	>6	X		dispersed
8	6 S	295	3	+6			decreasing
9	19 N	279	1	>6	X	14	dispersed
10	13 S	277	2	>6		13	decreasing
11	19 N	271	3	+2			decreasing
12	33 N	267	1	>6	X		dispersed
13	11 N	264	4	+6			decreasing
14	27 N	264	1	>6	X		dispersed
15	27 N	254	1	>6	X		dispersed
16	25 N	241	1	>6	X		decreasing
17	27 S	237	3	>6			decreasing
18	17 N	235	2	>6		17	decreasing
19	29 N	220	1	>6	X		dispersed
20	14 S	216	1	>6	X	19	decreasing
21	19 N	214	1	>6	X	18	decreasing
22	16 N	204	1	>6	X	18	dispersed
23	15 S	201	1	>6	X	22	dispersed
24	26 S	199	2	>6		20 + 21	decreasing
25	4 N	188	4	+4			decreasing
26	7 S	188	1	+5	X		dispersed
27	29 S	187	2	>6			decreasing
28	30 S	185	2	-4			stable
29	33 S	185	2	-5			?
30	14 N	184	5	>6			decreasing
31	12 S	178	2	+6			decreasing
32	23 S	168	2	0			decreasing
33	26 S	163	3	>6			decreasing
34	11 N	161	3	>6			decreasing
35	19 N	161	1	>6	X		dispersed
36	7 N	160	1	+1	X		dispersed
37	30 S	159	1	>6	X		decreasing
38	24 S	156	2	0			decreasing
39	22 S	154	2	>6			decreasing
40	5 S	153	1	>6	X		dispersed
41	14 N	150	2	>6			decreasing
42	9 S	146	3	+3			decreasing
43	28 S	138	1	>6	X		decreasing
44	15 N	139	2	+4			decreasing
45	11 S	133	2	>6			decreasing
46	10 N	130	3	+5			decreasing
47	13 S	119	2	>6			decreasing
48	22 S	111	1	>6	X	42	dispersed
49	19 N	110	6	+5			stable
50	17 S	83	1	+3	X		disappeared
51	14 N	71	2	>6			decreasing
52	17 N	66	1	>6	X		decreasing
53	32 S	63	1	+5	X		dispersed
54	7 S	60	2	+3			decreasing
55	14 S	50	1	+3	X		decreasing
56	10 N	31	4	>6			decreasing
57	28 N	31	2	-3			decreasing
58	15 N	21	1	>6	X		dispersed
59	16 S	19	2	>6			?
60	32 S	14	1	0	X		dispersed
61	10 N	10	3	+5			decreasing
62	29 N	8	1	>6	X	56	dispersed
63	28 S	4	5	+2			decreasing

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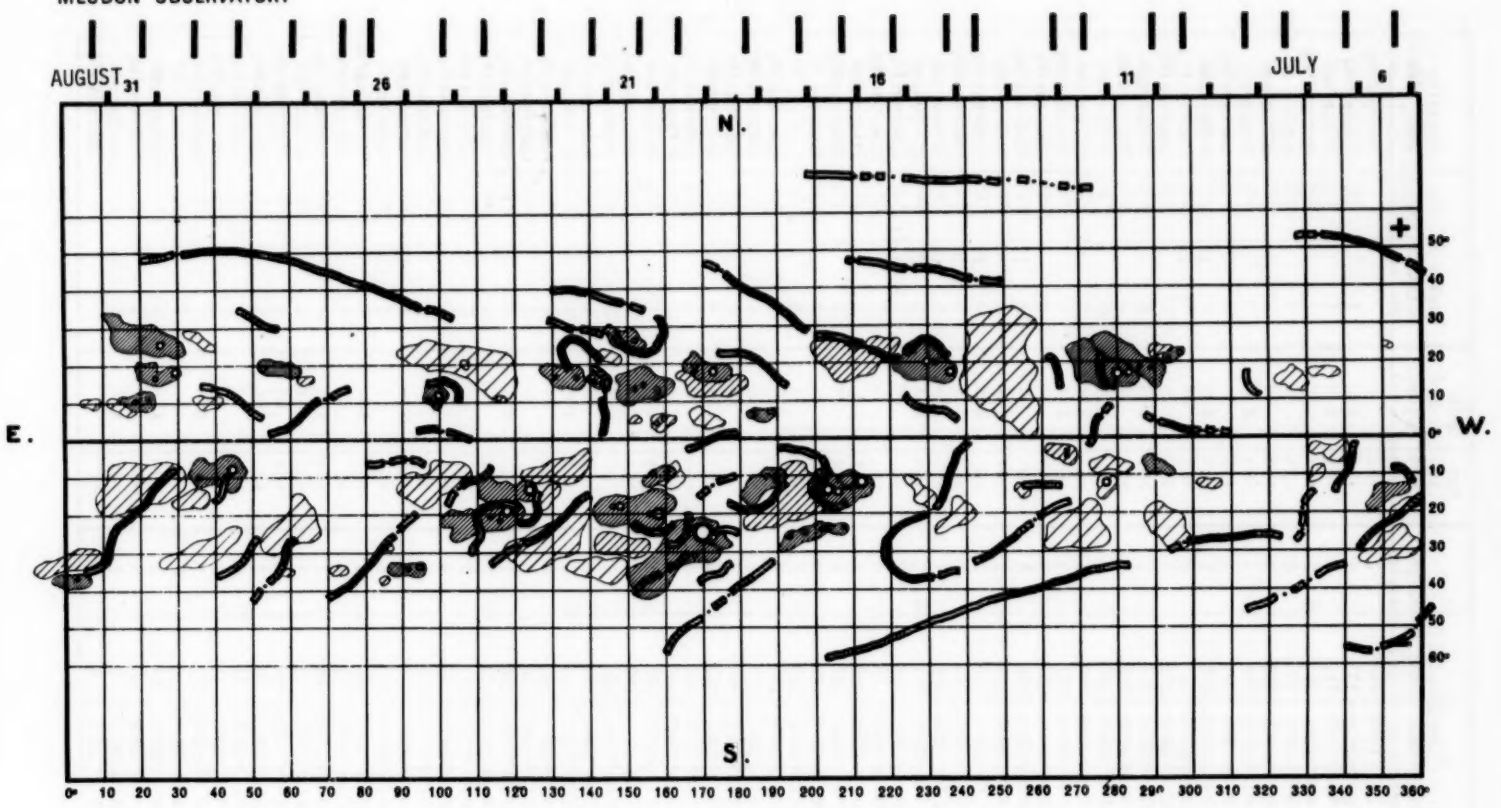
Misc
Jul-Aug 80

SYNOPTIC SOLAR MAP

CARRINGTON ROTATION 1697

July 5 - August 1, 1980

MEUDON OBSERVATORY

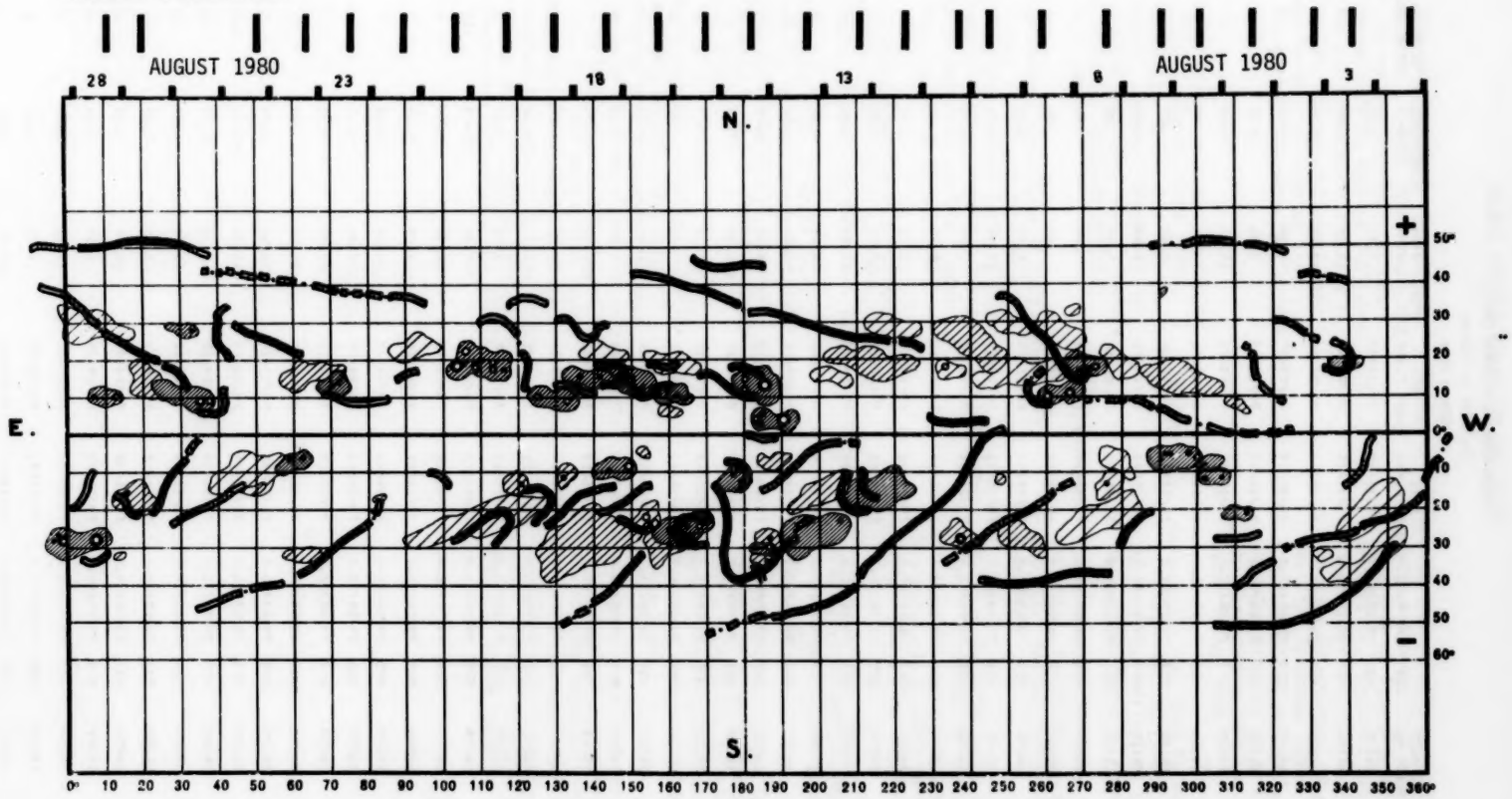


SYNOPTIC SOLAR MAP

CARRINGTON ROTATION 1698

August 1 - 29, 1980

MEUDON OBSERVATORY



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Misc
Jul-Aug 80

REGIONAL FLARE INDEX

Includes all Flares

AUGUST 1979

HC MATH PLAGE NO.	LAT	CMP DATE	DATE FIRST FLARE	DATE LAST FLARE	FLARE-INDEX SUM	FLARE-INDEX MEAN	TOTAL NO. OF FLARES
16170	N35	79/08/01.3	79/07/28	79/07/30	6.60	2.20	3
16174	S28	79/08/01.6	79/07/25	79/08/06	79.92	6.15	28
16175	S13	79/08/01.8	79/07/26	79/08/04	83.83	8.38	18
16177	N20	79/08/02.0	79/07/29	79/08/07	34.24	3.42	9
16195	N36	79/08/02.3	79/08/03	79/08/03	3.38	3.38	1
16176	N 7	79/08/02.4	79/07/29	79/08/09	19.76	1.65	12
16179	S29	79/08/02.5	79/07/26	79/07/26	.91	.91	1
16181	N18	79/08/02.9	79/07/27	79/07/31	4.32	.86	2
16182	N12	79/08/04.0	79/08/01	79/08/01	5.28	5.28	1
16186	S17	79/08/04.5	79/08/01	79/08/10	9.20	.92	8
16188	N20	79/08/05.5	79/08/10	79/08/10	.84	.84	1
16189	N20	79/08/06.3	79/08/10	79/08/10	.84	.84	1
16192	S11	79/08/07.3	79/08/02	79/08/04	6.12	2.04	9
16191	N26	79/08/07.9	79/08/01	79/08/07	31.81	4.54	20
16204	N30	79/08/08.8	79/08/05	79/08/05	1.94	1.94	1
16201	N14	79/08/09.8	79/08/10	79/08/10	5.28	5.28	1
16203	S27	79/08/09.8	79/08/08	79/08/11	6.76	1.69	2
16206	S25	79/08/11.3	79/08/05	79/08/11	12.19	1.74	5
16208	S16	79/08/11.4	79/08/05	79/08/15	15.87	1.44	12
16213	N16	79/08/12.9	79/08/06	79/08/12	16.46	2.35	5
16207	N26	79/08/13.1	79/08/08	79/08/20	20.30	1.56	11
16211	S26	79/08/13.9	79/08/07	79/08/19	20.31	1.56	9
16209	N15	79/08/14.2	79/08/07	79/08/21	410.03	27.34	77
16219	N34	79/08/14.2	79/08/10	79/08/12	5.30	1.77	2
16218	S19	79/08/15.3	79/08/11	79/08/11	.84	.84	1
16215	N38	79/08/16.2	79/08/10	79/08/10	0.00	0.00	1
16221	S 7	79/08/16.2	79/08/13	79/08/15	8.55	2.18	4
16216	N16	79/08/16.2	79/08/13	79/08/22	526.99	52.70	9
16225	S24	79/08/19.8	79/08/14	79/08/22	32.89	3.65	16
16222	N32	79/08/19.3	79/08/21	79/08/21	0.00	0.00	1
16229	N27	79/08/19.6	79/08/23	79/08/25	4.91	1.64	5
16224	S26	79/08/20.3	79/08/13	79/08/25	341.64	26.28	116
16243	S13	79/08/20.6	79/08/20	79/08/25	12.31	2.05	8
16244	N28	79/08/20.6	79/08/25	79/08/25	1.69	1.69	2
16230	N21	79/08/21.3	79/08/21	79/08/22	10.56	5.28	2
16231	S16	79/08/22.1	79/08/19	79/08/29	177.61	16.15	46
16233	N 7	79/08/22.6	79/08/16	79/08/20	15.55	3.11	7
16240	S17	79/08/24.4	79/08/18	79/08/25	54.95	6.87	21
16237	N27	79/08/25.4	79/08/24	79/08/29	10.56	1.76	3
16239	N 6	79/08/26.2	79/08/18	79/09/01	835.54	55.70	143
16238	N19	79/08/26.4	79/08/19	79/09/02	160.29	10.69	34
16241	S32	79/08/26.5	79/08/20	79/09/02	78.73	5.05	42
16245	S20	79/08/28.1	79/08/22	79/08/27	22.91	3.82	11
16250	N17	79/08/29.0	79/08/30	79/09/03	16.75	3.35	7
16248	N 6	79/08/29.2	79/08/24	79/08/25	6.12	3.06	3
16253	S22	79/08/29.2	79/08/22	79/09/03	16.97	1.31	9
16247	N29	79/08/30.4	79/08/27	79/08/27	10.34	10.34	1
16251	S28	79/08/30.8	79/08/27	79/08/29	17.58	5.86	6

SOME OTHER SOURCES OF DATA

Data Available: Some data available in publication form are cited here. A list is given, along with addresses of the responsible institutions. The WDC-A for Solar-Terrestrial Physics publishes the Toyokawa, Ottawa and Penticton radio data in its monthly publication, *Solar-Geophysical Data*. The WDC-A for Solar-Terrestrial Physics also receives most of the periodicals when they become available.

Belgium: *Bulletin d'Observations: Activite Solaire - Observations Radioelectriques Solaires - 600 MHz (Humain, Belgium)* Observatoire Royal de Belgique, Ave. Circulaire 3, Brussels, Belgium (monthly since 1962)

Canada: *Solar Noise Observations at 2800 Mc/s (Ottawa - ARO) and 2700 Mc/s (Penticton - DRAO)* Series C Monthly Report, National Research Council, Radio Astronomy Section Ottawa 7, Ontario, Canada (since 1947)

France: *Carte Synoptiques de la Chromosphere Solaire* Observatoire de Paris, 92 Meudon, France (monthly since 1931)

Germany: *Daily Mean Value of Solar Flux Density* Heinrich-Hertz Institut, 1199 Berlin-Adlershof, Rudower Chaussee 5, G.D.R. (monthly since Jul 1957)

Italy: *Solar Phenomena - Monthly Bulletin and Photographic Supplement* Osservatorio Astronomica di Roma, Monte Mario, Rome, Italy (monthly since 1958); *Osservazion Solari, Solar Flux and Distinctive Events* Osservatorio Astronomico Di Trieste (quarterly since 1965); *Solar Observations made at Catania Astrophysical Observatory* (annually since 1967)

Japan: *Monthly Report of Solar Radio Emission* Radio Astronomy Section, Research Institute of Atmospherics, Nagoya University, Toyokawa, Japan (since 1956); *Solar Activity Chart* WDC-C2, Toyokawa Observatory, Nagoya University, Toyokawa, Japan (annually since 1968); *IAU Quarterly Bulletin on Solar Activity* Tokyo Astronomical Observatory, Mitaka, Tokyo, Japan (since 1978)

Netherlands: *Geomagnetic Data* IAGA Bulletin No. 12 (1932-69), No. 32 (since 1970) IUGG Publications Office, 39 ter, Rue Gay-Lussac, Paris V, France (annually)

Philippines: Manila Observatory "Solar Maps and Activity", Manila Observatory, P.O. Box 1231, Manila, Philippines (monthly)

Switzerland: Bulletin of "Berne Solar Observations", Institute of Applied Physics, Div. of Solar Observations, Sidlerstrasse 5, 3012 Berne, Switzerland (since 1968)

Taiwan: *Report on Sunspot Observations* Taiwan Provincial Weather Bureau Observatory, Taipei, Taiwan (quarterly since 1957)

USSR: СОЛНЕЧНЫЕ ДАННЫЕ *(Solar Data)* USSR Academy of Science (monthly since 1958); КОСМИЧЕСКИЕ ДАННЫЕ *(Cosmic Data)* (monthly since 1962); *Magnetic Fields of Sunspots* (bimonthly since 1964)

USA: *Preliminary Report and Forecast of Solar-Geophysical Activity* Space Environment Services Center, NOAA, Boulder, Colorado 80303 USA (weekly); *Solar-Geophysical Data* NOAA, Boulder, Colorado 80303 USA (monthly since November 1955)

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UAG-9 "Data on Cosmic Ray Event of November 18, 1968 and Associated Phenomena," compiled by J. Virginia Lincoln, World Data Center A, Upper Atmosphere Geophysics, ESSA now NOAA, Boulder, CO, April 1970, 109 pp, $0.55.

UAG-10 "Atlas of Ionograms," edited by A.H. Shapley, ESSA Research Laboratories now NOAA, Boulder, CO, May 1970, 243 pp, $1.50.

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UAG-13 "Data on the Solar Proton Event of November 2, 1969 through the Geomagnetic Storm of November 8-10, 1969," compiled by Dale B. Bucknam and J. Virginia Lincoln, World Data Center A, Upper Atmosphere Geophysics, ESSA now NOAA, Boulder, CO, May 1971, 76 pp, $0.90.

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UAG-28 "Collected Data Reports on August 1972 Solar-Terrestrial Events," Parts 1, 2 and 3, edited by Helen E. Coffey, World Data Center A for Solar-Terrestrial Physics, NOAA, Boulder, CO, July 1973, 932 pp, $4.50.

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UAG-30 "Catalogue of Data on Solar-Terrestrial Physics," prepared by NOAA Environmental Data Service, Boulder, CO, October 1973, $1.50. Supersedes UAG-11, 15, and 20 catalogs.

UAG-31 "Auroral Electrojet Magnetic Activity Indices AE(11) for 1969," by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Boulder, CO, February 1974, 142 pp, $0.75.

UAG-32 "Synoptic Radio Maps of the Sun at 3.3 mm for the Years 1967-1969," by Earle B. Mayfield, Kennon P. White III, and Fred I. Shimabukuro, Aerospace Corp., El Segundo, CA, April 1974, 26 pp, $0.35.

UAG-33 "Auroral Electrojet Magnetic Activity Indices AE(10) for 1967," by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Boulder, CO, May 1974, 142 pp, $0.75.

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UAG-37 "Auroral Electrojet Magnetic Activity Indices AE(10) for 1966," by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Boulder, CO, December 1974, 142 pp, $0.75.

UAG-38 "Master Station List for Solar-Terrestrial Physics Data at WDC-A for Solar-Terrestrial Physics," by R.W. Buhmann, World Data Center A for Solar-Terrestrial Physics, Boulder, CO; Juan D. Roederer, University of Denver, Denver, CO; and M.A. Shea and D.F. Smart, Air Force Cambridge Research Laboratories, Hanscom AFB, MA, December 1974, 110 pp, $1.60.

UAG-39 "Auroral Electrojet Magnetic Activity Indices AE(11) for 1971," by Joe Haskell Allen, Carl W. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Boulder, CO, February 1975, 144 pp, $2.05.

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UAG-41 "H-Alpha Synoptic Charts of Solar Activity During the First Year of Solar Cycle 20 October 1964 - August 1965," by Patrick S. McIntosh, NOAA Space Environment Laboratory, Boulder, CO and Jerome T. Nolte, American Science and Engineering, Inc., Cambridge, MA, March 1975, 25 pp, $0.48.

UAG-42 "Observations of Jupiter's Sporadic Radio Emission in the Range 7.6-80 MHz, 10 December 1971 through 21 March 1975," by James W. Warwick, George A. Dulk and Anthony C. Riddle, University of Colorado, Boulder, CO, April 1975, 49 pp, $1.15.

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UAG-49 "Catalog of Standard Geomagnetic Variation Data," prepared by NOAA Environmental Data Service, Boulder, CO, August 1975, 125 pp, $1.85.

UAG-50 "High-Latitude Supplement to the URSI Handbook on Ionogram Interpretation and Rediction," edited by W.R. Piggott, British Antarctic Survey, c/o Appleton Laboratory, Slough, UK, October 1975, 294 pp, $4.00.

UAG-51 "Synoptic Maps of Solar Coronal Hole Boundaries Derived from He II 304A Spectroheliograms from the Manned Skylab Missions," by J.D. Bohlin and D.M. Rubenstein, U.S. Naval Research Laboratory, Washington, DC, November 1975, 30 pp, $0.54.

UAG-52 "Experimental Comprehensive Solar Flare Indices for Certain Flares, 1970-1974," by Helen W. Dodson and E. Ruth Hedeman, McMath-Hulbert Observatory, University of Michigan Pontiac, MI, November 1975, 27 pp, $0.60.

UAG-53 "Description and Catalog of Ionospheric F-Region Data, Jicamarca Radio Observatory (November 1966 - April 1969), by W.L. Clark and T.E. Van Zandt, NOAA Aeronomy Laboratory, Boulder, CO, and J.P. McClure, University of Texas as Dallas, Dallas, TX, April 1976, 10 pp, $0.33.

UAG-54 "Catalog of Ionosphere Vertical Soundings Data," prepared by NOAA Environmental Data Service, Boulder, CO, April 1976, 130 pp, $2.10.

UAG-55 "Equivalent Ionospheric Current Representations by a New Method, Illustrated for 8-9 November 1969 Magnetic Disturbances," by Y. Kamide, Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, CO; H.W. Kroehl, Data Studies Division, National Geophysical and Solar-Terrestrial Data Center, Boulder, CO; M. Kanamitsu, Advanced Study Program, National Center for Atmospheric Research, Boulder, CO; Joe Haskell Allen, Data Studies Division, National Geophysical and Solar-Terrestrial Data Center, Boulder, CO; and S.-I Akasofu, Geophysical Institute, University of Alaska, Fairbanks, AK, April 1976, 91 pp, $1.60 (microfiche only).

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UAG-63 "Geomagnetic Data for March 1976 (AE(7) Indices and Stacked Magnetograms)," by Joe Haskell Allen, Carl C. Abston and Leslie D. Morris, National Geophysical and Solar-Terrestrial Data Center, Boulder, CO, September 1977, 57 pp, $1.11.

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UAG-72 "Energy Release in Solar Flares, Proceedings of the Workshop on Energy Release in Flares, 26 February - 1 March 1979, Cambridge, Massachusetts, U.S.A.," edited by David M. Rust, American Science and Engineering, Inc., Cambridge, MA, and A. Gordon Emslie, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA, July 1979, 68 pp, $1.50 (microfiche only).

UAG-73 "Auroral Electrojet Magnetic Activity Indices AE(11-12) for January - June 1975," by J.H. Allen, C.C. Abston, J.E. Salazar and J.A. McKinnon, National Geophysical and Solar-Terrestrial Data Center, NOAA, Boulder, CO, August 1979, 114 pp, $1.75.

UAG-74 "ATS-6 Radio Beacon Electron Content Measurements at Ootacamund, India, October - July 1976," by S.D. Bouwer, K. Davies, R.F. Donnelly, R.N. Grubb, J.E. Jones and J.H. Taylor, NOAA Space Environment Laboratory, Boulder, CO, and R.G. Rastogi, M.R. Deshpande, H. Chandra and G. Sethia, Physical Research Laboratory, Ahmedabad, India, March 1980, 58 pp, $2.50.

UAG-75 "The Alaska IMS Meridian Chain: Magnetic Variations for 9 March - 27 April 1978," by H.W. Kroehl and G.P. Kosinski, National Geophysical and Solar-Terrestrial Data Center, Boulder, CO; S.-I Akasofu, G.J. Romick, C.E. Campbell and G.K. Corrick, University of Alaska, Fairbanks, AK; and C.E. Hornback and A.M. Gray, NOAA Space Environment Laboratory, Boulder, CO, June 1980, 107 pp, $3.00.

UAG-76 "Auroral Electrojet Magnetic Activity Indices AE(12) for July - December 1975," by J.H. Allen, C.C. Abston, J.E. Salazar and J.A. McKinnon, National Geophysical and Solar-Terrestrial Data Center, NOAA, Boulder, CO, August 1980, 116 pp, $2.50.

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UAG-79 "Solar Observations During Skylab, April 1973 - February 1974, I. Coronal X-Ray Structure, II. Solar Flare Activity," by J.M. Hanson, University of Michigan, Ann Arbor, MI; and E.C. Roelof and R.E. Gold, The Johns Hopkins University, Silver Spring, MD, December 1980, 43 pp, $2.50.